Our Billion Dollar Forest Boom — pp. 49-88

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Dow Chemical Prexy

Leroy D. Smithers, 48, takes over the controls of one of Canada's fastest expanding chemical firms, Dow Chemical of Canada. Since its first manufacturing move into Sarnia, in 1947, Dow has added 12 plants and as many new products. Some of the products were "firsts" in this country. Dow's new prexy came to Sarnia as works manager in 1946, moved up to executive vice-president in 1950.

THE NATION'S BUSINESS

Will Your Widow Use Money Well?

The average Canadian woman can expect to live at least three years longer than her husband. In 1954, the average age at death of Canadian males was 57.3; of Canadian females, an even 60. Since women normally marry men older than themselves, it's clear that a wife is apt to be a widow for upward of five years.

It's probable that the gap between the two figures is even wider in the higher income brackets. The stresses and strains of executive life are killers, while possession of an above-average income is apt to be a life-preserver for a woman. The duration of probable widowhood is longer for wives of executives and professional men than the average.

These rather grisly facts help to account for the keen interest in investments being shown by Canadian women.

Now that the winter study season is due to begin, courses in investment will be crowded with women who as yet don't know a debenture from a doily.

They're not all businesswomen or heiresses. Many of them are housewives, attending at the urging of husbands who consider a financially literate wife the best bulwark against chaos for the family upon the death of the chief income-earner.

Others are women who realize the difference between being purchasing agent for the family—handling current cash outlay—and making big decisions about investment and savings.

She Needs Basic Information

Anyone who has been called upon to advise a widow on investments—either professionally or personally—will welcome this trend. A woman who understands (for example) the nature of the risk involved in buying common stocks can nearly always be guided toward a more rewarding investment pattern than one who must be treated like a child in financial matters.

Some of the women who have become interested in investment in recent years have, of course, gone far beyond the basic minimum of information offered in investment courses. Some have taken to investment like ducks to water, bringing to bear their experience as consumers—which isn't totally irrelevant. More than one busy executive has thankfully handed a good part of the responsibility for family investments to his wife.

Female interest in investment is by no means a new phenomenon, of course. What is new is the numbers of women who are seriously interested, and the encouragement they are getting from the business and financial community. The harsh facts of the life-tables, and the experience of what taxes and inflation can do to a family's resources have led Canadians to realize that investing is a skill which women, too, must learn.

What does your wife know about investing?

* * *

Let's Have Candid Appraisal

Why is it so difficult to get people to talk sense about Canada's extraordinary position in the balance of international payments?

We have been running a deficit of about $1 in every $5 on our current transactions with other countries. It is covered by the inflow of capital from foreign investors who expect to get a better return from Canada than elsewhere. It is so adequately covered that demand for Canadian dollars keeps them at a premium.

We are running the biggest deficit in the world because we can attract more capital than any other country in the world. Whichever way you look at it, this puts Canada in a unique and somewhat startling position. If ever our economic position deserved thorough examination and discussion, surely this is the occasion. And, fortunately, the existence of the Gordon Commission on Canada's Economic Prospects promises dispassionate study. Why, then, are many Canadians so emotional about it?

You'll find some people talking as though we had lost our economic independence forever and were heading straight for a slump as well. You'll find others whose reaction never gets beyond a prickly defensiveness. The deficit is natural and good, they say; the foreign capital is just what we want, and now please stop talking about it. These are irrational views.

There Are Disadvantages

Canadian development does demand an inflow of foreign capital. It is natural for an expanding economy to import more than it exports.

Canada is fortunate to be able to get foreign capital; just look around the world at all the countries which desperately lack for it.

Surely, however, we can admit all this without having to deny some real disadvantages in such an overwhelming inflow of capital as we have had this year. It has been a powerful factor in pushing the pace of development to the verge — or beyond — of what we can accomplish without serious inflation. We may reasonably feel confident that much of the foreign capital is far too deeply committed to withdraw overnight. But it's also true that New York, from which so much of the capital comes, is a financial centre given to quick changes of mood. There must be some concern too, about the extent to which dynamic resources are falling into American control.

To admit the causes for anxiety is not to advocate that we rush into violent actions or start pounding nationalistic drums. But it should clear away some of the emotionalism concerning the great national problems which must follow expansion pushed at its present pace, with its present degree of dependence on foreign capital.

Suez May Speed Boost For Trans Mountain

Canal Closing Would Add to Complications of World Oil Picture, Western Europe Supply, With Bigger U. S. Markets Likely For Canada

By W. L. DACK

A Suez-inspired reshuffle of Far and Middle East oil shipping routes would have an almost immediate impact on Canada's oil picture:

- It would integrate this country's oil marketing effort more closely than ever into an over-all Western Hemisphere program.
- It would open up an important California market to Canadian crude, and expansion of **Trans Mountain's** pipe line.
- It could bring about a boost in world crude oil prices that seem inevitable anyway—a boon for Western oil producers, higher gasoline prices for the motoring public, fuel oil prices for heating.

If Far and Middle East oil is to be re-routed around the Cape of Good Hope on its way to Western Europe, then the expansion in Canadian oil shipments could be limited only by amount of extra capacity in our pipelines.

Right now that capacity surplus is mighty small. All told, we couldn't squeeze much more than an extra 30,000-40,000 barrels of oil a day through the two major "big inch" lines.

In the event of a complete break-down in Middle East oil shipments, U. S. Office of Defense Mobilization is counting on something like an extra 400,000 b/d from this country—a doubling of output.

The big market jump would be into California via the **Trans Mountain** oil pipeline and offshore tanker shipments out of Vancouver.

Major Canadian and U. S. oil companies who share ownership and help direct Trans Mountain are now re-assessing their timetable of expansion in the light of the Suez situation as well as a generally fast-expanding market.

They are now seriously considering doubling line capacity instead of waiting to move up to that level by several stages stretched over the next three years. This month, pipeline throughput is running at a new peak of 157,000 b/d, made possible by two hastily completed temporary pumping stations which has kept the line one short step ahead of demand with a capacity of 180,000 b/d.

Tanker Supply

Here's the way top Canadian oil marketing experts see the situation developing:

Regardless of tanker rates — and they are still rising — and whether the U. S. will subsidize the extra costs of shipping around the Cape, there just wouldn't be enough tankers available to supply the western European and North American oil markets with Middle and Far East crude if the Cape route is used. It would take an estimated 500,000 b/d to maintain supply because of the shipping time lag in the extra 5,000 miles around the Cape.

An extra 330,000-350,000 b/d would be needed by U. S. and Canadian refineries now running on Middle East crude. In other words the oil tanker diversion around the Cape, in the wake of a Canal shutdown, would call for an estimated 800,000 to 1 million b/d extra production from Western Hemisphere sources — that would mean U. S., Venezuela and Canada.

For maximum efficient tanker use in any closely integrated plan, U. S. West Coast import requirements would have to be met as much as possible from Canadian sources. Any central authority—

(Continued on page 3, col. 3)

Making Money?

For money-making hints, turn to p. 5 and The Financial Post's new investor's column, Note.

Here's an easy - to - read memo of quick facts and brief comments on new financing issues, companies whose securities are held by the public, and investment trends.

This week regular Financial Post coverage of investment includes MacNab (p. 16), Growth Stocks (p. 37), Pathfinder (p. 10).

ALSO INSIDE:

The competition for college grads is getting tougher, p. 27.

J. B. McGeachy finds Britain in a fretful mood, p. 7.

Bruce Hutchison discusses the U. S.'s "Men of Power" on p. 15.

Here's how Ottawa hires its top talent, p. 11.

There's a danger that politicians may barter away Canada's priceless power heritage, p. 25.

The U. S. is looking to Canada for its hiked nickel demands, p. 47.

The building pattern is changing across Canada; city dwellers are trending toward apartments, p. 29.

Gas vs. Oil Market Fight Heating Up

The recent average 10-12% natural gas rate cut proposed by Consumers' Gas Co. of Toronto will bring gas househeating costs closely in line with that of fuel oil, gas officials told The Financial Post this week.

Gas men firmly believe that in convenience and cleanliness they can easily outpace all other fuels.

An average development house in the Toronto area heated by gas would likely consume around 100,000 cu. ft. of gas in a normal year. Under the new rate setup this would cost about $152 ($163 under the present rate). But if the householder also cooked and heated his water by gas—thereby boosting his over-all consumption up to around 124,000 cu. ft. annually—then the advantage from the larger volume usage would lower his heating costs to around $121 a year (For details of rate changes, see page 48.)

To produce the same heat in an oil-heated house would require some 714 gal. of fuel oil, the gas officials say. At current price of fuel oil total househeating cost for the year would then work out at approximately $129.

Both fuel oil and gas people, however, claim there are many variables to take into consideration and that these make absolute comparisons between houses and fuels virtually impossible.

Gas marketing officials are ad-

(Continued on page 3, col. 1)

Better Hire Now, Labor Tightening

Canada's Labor Market Tightest Since Spring And Getting Worse—Prairies Squeezed Hard; Reason: Students Heading Back to Classrooms

By MICHAEL BARKWAY

OTTAWA—(Staff)—The labor market is now at its tightest point since the spring. About 120,000 students, out of 144,000 teen-agers who swelled the working force in June and July, are leaving to go back to college.

There is no labor reserve from which their places can be filled.

The job-seekers have been down to about 100,000 ever since July. That is out of a labor force now estimated to be approaching six million (5,926,000) it is only 1.7%, which is about as low, for all practical purposes, as we can get.

As the seasonal supply of students is withdrawn, the labor force total will drop as it always does from September on.

The high demand may keep some part-time workers in the labor force, and the end of the harvest should release some workers for other jobs.

But it now seems unlikely that logging firms will be able to get as much of their cut completed before Christmas as they would like. And no relief is in sight for the supply of skilled workers who are the hardest to get in nearly every part of Canada.

On past experience the relatively few teen-agers who will stay at work after college terms start will include more girls than boys, which offers little help to construction or industrial trades.

Between June and July this year, 144,000 youngsters between 14 and 19 joined the labor force—not quite enough to offset other age groups which left in that month. (Total increase was only 127,000). Of these, 106,000 were boys, and 38,000 girls.

Both figures were slightly under last year's student entry (110,000 boys and 41,000 girls). The probability is that more than 90% of the boys are now going back to school and about two-thirds of the girls.

Last year 106,000 out of the 110,000 boys left the labor force in September, and 29,000 out of the 41,000 girls.

Here is a quick run-down of the current situation by regions:

The Prairies are still the tightest labor market in Canada. There are 2% more workers than a year ago — an increase of 23,000; but the jobs have increased a good deal faster than the workers.

The three provinces are divided into 20 "labor market areas," and only three of them claim to be in balance. All the rest are in shortage.

Manpower hasn't been so scarce at any time in the last five years. During August the number of people working on farms increased significantly; and this must have meant a drain on other occupations—particularly, perhaps, logging and construction.

The best hope for the fall is that these people will go back to other work, and that fall construction may be able to catch up with some of the backlog.

Prairie Shortages

But meanwhile the list of shortages in the Prairie provinces has grown steadily longer. At the beginning of this month, the labor department said the position was "acute," and mentioned specially: skilled construction workers, loggers, engineers, draughtsmen, welders, sheet metal workers and auto mechanics.

There is also a scarcity of sales people, stenographers and other clerks.

Ontario's labor force is 5% higher than a year ago — an August-to-August increase of 103,000 on just over two million.

But jobs are looking for people

(Continued on page 3, col. 1)

Here's How Today's Boom Adds to Amount We Owe

For details, see p. 8

OTTAWA (Staff) — Canada's total output of goods and services, in this extraordinary boom year, is running about 11% ahead of last year. But the national debt to other countries is increasing even faster, and one third of Canada's increased demand in 1956 has been met by foreign supplies.

At mid-year Canada's foreign indebtedness reached the all-time peak of $8½ billion, and it is still increasing at a faster rate than in any post-war year.

It represented at mid-year a burden of about $530 on every Canadian man, woman and child — almost twice what it was in 1949.

Output of the Canadian economy (gross national product) this summer represented about $1,840 for every Canadian. This is up from $1,700 at mid-1955 — an increase of 8% per capita.

The per capita foreign debt, at $530 per head, compared with about $460 per head a year ago—an increase of 15%.

These estimates are derived from DBS figures published this week, which give a vivid picture of the unprecedented 1956 boom.

Details of the National Accounts and balance of payments reports for the first half year are given on page 8; but here are some of the other highlights:

—Total Canadian demand for goods and services has been running about one seventh higher than in the first half of last year.

—Business investment, including inventories and new plant and equipment, provided the big boost. It is almost 50% higher than last year.

—All the rest taken together—government and personal spending, housing and export demand — were up less than 9% from last year.

—Nearly one third of the increase in Canadian demand has been met from foreign sources by

(Continued on page 3, col. 3)

Provinces Will Trade Data In Drive on Stockateering

In an effort to curb drifting of "undesirables" from province to province, Canada's securities authorities have agreed to exchange information on any disciplinary actions they take.

At the recent conference of Canadian securities administrators in Saint John, N.B., each province undertook to advise other provinces whenever it cracks down on an individual or firm.

Reason for the closer co-operation is a drift of stockateers out of Ontario and Quebec and into the western provinces. Western Canada, it was disclosed, is encountering the same enforcement problems previously met by the two big eastern provinces.

(Ontario already discloses all disciplinary moves taken in a monthly securities commission bulletin.)

It was felt that provincial legislation across Canada is uniform for all practical purposes but enforcement varied and that better enforcement through exchange of information could help stop high-pressure stock-selling tactics.

The representatives from all

(Continued on page 3, col. 8)

Glassy, Classy '57 Cars May Mean Plate Shortage

By CLIFFORD FOWKE

Canada's construction industry within the next six months may find itself riding for a glass shortage because of the 1957 auto models.

The increased spread of windshield and windows planned for the new cars, together with an expected rise in auto sales, could spell a shortage of plate glass again for major building projects.

One model car has increased use of glass by 38%.

Most plate glass used in Canada has to be imported, and here's the position as our biggest suppliers see it:

- The auto industry uses about 60% of the glass, construction about 30%, other users about 10%.
- Rapid expansion of plate glass manufacturing facilities throughout the world has barely kept pace with the great upsurge in demand.
- The previous pattern has been that when car production climbed construction went short. Now the increased use of plate glass in new model cars promises to complicate the situation further.

The news may come as a shock to construction men who so far this year have been enjoying a season of comparative plenty in glass. They hoped they had got rid of at least one of various material headaches.

This year, although Canadian auto production has remained stable, output of U. S. factories dropped about 25%. As an auto uses up about 40 sq. ft. of plate glass, that meant some 80 million sq. ft. of plate glass was available for other users.

A lot of that surplus plate has come into Canada. In the first four months of this year, plate glass imports jumped nearly 13% over the same 1955 period — an export bonanza in which both the U. S. and European countries joined, as they caught up with arrears of orders from construction, mirror and other users.

Correction on Corporate Givings

Certain figures on the donations of business corporations for charitable and educational purposes were given on this page last week. In transmission from St. Andrews-by-the-sea, where the item was written, one figure got snarled up and was printed incorrectly.

Herewith the facts as presented at the Avro manpower conference:

Canadian law allows up to 5% tax deductible contributions for charitable and educational contributions.

The record shows that Canadian corporate contributions of this kind — for charitable and educational purposes — total 1.4%.

The average corporate spendings for such purposes in the United States are 1.5%. But of that amount only .37% of the U. S. contributions goes for educational purposes.

THE SIGNS AND PORTENTS

CANADA'S MILLIONS of acres of unexplored territory are spotlighted by Suez crisis—even if it's settled without arms, it points up insecurity of Middle East oil reserves in emergency. U. S. and European capital will flow to Canada at unprecedented clip for land acquisition, exploratory drilling in northwest B. C., Alberta foothills, Saskatchewan, Manitoba, N. W. Territories.

* *

CANADIAN WHEAT BOARD won't likely be doing Nasser any favors. Egypt recently told Canada it's looking for 100,000 tons wheat, 20,000 flour. Country hasn't the necessary dollars, wants to barter or pay in Egyptian currency. There's no indication that the Wheat Board's no- tickee - no - shirtee policy will be changed.

* * *

IN BIGGEST hotel-building spurt since the 'twenties, Canadian hotelmen have spent $50 million on new facilities in two years, are now busy spending another 50. Bulk of building (8,900 new rooms, associated facilities) is centred at Vancouver, Calgary, Edmonton, Toronto, Montreal.

* * *

A QUOTE WORTH noting—Peter Colefax, president, American Potash & Chemical Corp., gives his reasons for optimism in the chemical industry: "There is a healthy demand for basic chemicals in many fundamental industries and a strong growth trend. . . . The many intriguing new (chemical) products . . . are increasing consumption in present markets (and) are creating entirely new markets."

* * *

CANADIAN EXPORTERS will find that basic industry growth in Argentina offers new markets for Canadian transportation equipment, construction materials, industrial machinery. Forthcoming American credits and recent British ones will provide wherewithal.

* * *

NOTE TO CANADIAN education boards: Collective bargaining with teachers' "unions," not "associations," doing the talking will be big issue in U. S. education circles next year. They'll stress democracy-in-action theme, steer clear of strike threats. Canadian teachers' groups usually follow U. S. lead, with lag of year or two.

* * *

CIVIL SERVICE is finding university-trained brains shortage helps efficiency. Departments have taken to raiding other departments. This keeps department heads on their toes, working conditions pleasant, means future deputy ministers will probably have had a good variety of experience. Result: Taxpayer benefits.

YOUR NEIGHBORHOOD THEATRE may offer you see-now-pay-later movies. To combat TV competition, some U. S. chains are experimenting with credit card systems similar to those used by oil companies. Canadian exhibitors are waiting for U. S. results; if the system works there, it'll be used here.

* * *

MEDICINE'S LONG QUEST for simple, reliable test for early-stage breast cancer may have been successful. New chemical, heptaldehyde, brings easily detectable skin - temperature changes in breast cancer cases, has no effect with non-cancerous tumors; may eliminate necessity of 95% of breast operations (which are made to secure specimens for diagnosis).

* * *

BOTTOMS UP? "Let's put a box top on the bottom too," said the sales executive in the cartoon. Dominion Dairies officials looked, chuckled -- and decided to try it, offering one premium with the top, another with the bottom. Bottom's just as effective as the top any day.

* * *

MORE POWER will come from the Seaway than was expected. Canadian research has found that dredging below the Barnhart Dam is possible, can increase the 90-ft. head by as much as one foot. Power output, set at 2.2 million hp, may now amount to 2.6 million, presumably would also be split 50-50 between us and the Americans.

* * *

OTTAWA BETS Eisenhower puts off the New England ground fish tariff question until after the election, or comes up with a modification. A quota on imports would hurt Canadian fishermen most.

* * *

CHARTER FLIGHTS to Europe will boom next year. Fare for bona fide organizations Montreal-London may be as low as $198 per person return.

* * *

LOOK FOR MORE zing in retailers' campaigns for freedom in opening, closing regulations now that fall selling season is under way. Night shopping just introduced in Vancouver, Winnipeg; campaigns in Ottawa, Fort William, have hit snags. More flexibility is issue in Edmonton. Ontario Supreme Court has ordered Windsor to pass a bylaw permitting night openings by Department stores.

* * *

MYSTERIOUS GOVERNMENT announcement that it has let $30,000 contract "for the development and supply of wannegans" isn't just Ottawa doubletalk. A wannegan (correctly, wanigan, after an Indian word) is a sort of Arctic "trailer," a multi - purpose wooden hut to be clapped onto a sled, giving the army moveable working or storage quarters under the northern lights.

Hope Eisenhower Can Stall U.S. Restrictions on Fish

OTTAWA (Staff)—The latest threat of U. S. tariff action against Canada's East Coast fishermen—1956 version — looks like the worst yet.

It's coming up just before the presidential election, and it's thought here that only President Eisenhower himself can hold the U. S. to its obligations and prevent a tariff increase.

The threat is:

- An increase in duty on fresh fish fillets and frozen fish blocks—most of which go into fish sticks.
- And/or a quota on imports.

This would bring great hardship to our Maritime industry which supplies almost half of the more than 200 million lb. consumed in the U. S.

Canadian fishermen supply about two thirds of all U. S. imports.

The threat will arise on or before Oct. 17. This is the date by which, according to law, the U. S. Tariff Commission must make public its recommendations. It has been looking at the situation—this time—since January.

The background:

1. New England ground fishermen (fishermen who fish for cod, haddock, hake, pollock, cusk and

(Continued on page 3, col. 1)

Stock Market Highlights

Industrials

Canadian industrial stocks following sagging Wall Street in almost uninterrupted general decline. However, Canadian slide not quite as steep as U. S. issues. For details on some of the stocks that moved, see p. 4.

Mines and Oils

Activity slows to a comparative crawl in **mining and oil** issues. Prices lower mostly on lack of buying rather than any notable increase in selling. For details on some of the stocks that moved, see p. 46.

Base metal leaders again mildly lower with profit-taking hitting copper issues which featured recent markets.

Western oil and gas stocks also dip although not as much as remainder of market with companies standing to benefit from Suez Canal troubles.

the "Tear Drop" flat-topper

A new, more streamlined version of last season's best-selling "Top Level"—the "Tear Drop" Flat-Topper hat with flattering tear-shaped crown, narrow brim, continental back-bow. Fine fur felt in newest Fall shadings of blue, grey and brown. Its up-to-the-minute styling is typical of all furnishings that wear the label

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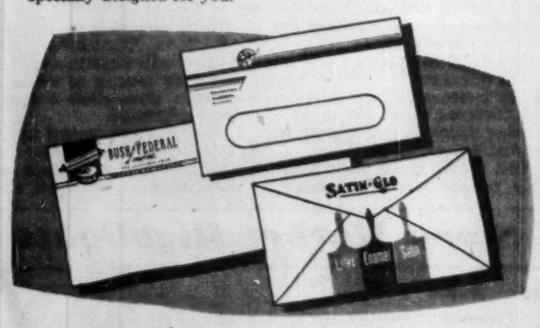

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ENVELOPES AND PRINTING PAPERS

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SALES AND SERVICE COAST TO COAST

Trend of Business

Farmers' income making big comeback. First half year cash income from sale of farm products estimated at $1,188 million. This is 13.1% higher than first half of '55, 11% above first half of '54—and second only to peak $1,241 million in first six months of '51. Gains for all provinces except PEI and Ontario. Bigger returns from: grain, poultry, eggs, dairy products and larger wheat participation payments.

Pacific fisheries chalk up major gains. During July, landings reached 51.1 million lb., 84% larger than a year earlier. Value of the catch is almost $8.9 million, 75% higher. Increase due to big salmon run. Meanwhile, east coast catch showed modest advances: 292.2 million lb., up 7% worth almost $8.2 million for a 6% year to year increase.

A look at the steel picture. Sharp rise in steel output continues as July production of ingots and castings amounts to 441,563 tons. This output, snapped up by consumers, is 22.4% higher than that of July '55. The month's gain pushed year to date output to just over 3 million tons, 21.7% more than that produced in the first seven months of last year.

Auto dealers report best July ever. New car sales topped 42,000 for a record $114.4 million. Number sold is 5.2% higher than a year ago and retail value is up 10.4%. Cumulative sales for the year are 6.3% higher in number and 13.3% in value as against the same months in '55.

Commercial vehicle sales show even bigger gains. In July some 9,296 new units were sold (+25.0%) for $32.9 million (+44.9%). Total first seven month sales are running 21.8% higher in number and 51.5% higher in value.

With bigger sales, there's heavier financing. During July 22,067 new cars and 3,417 commercial vehicles were bought on the installment plan. In numbers of motor vehicles this spells a 42.1% increase over the total financed a year earlier. Amount of financing involved: $58.4 million or 25.8% more than in the same month last year.

No let-up in fast-paced consumer buying. Retail sales totaled $1,185 in July, 6.6% higher than a year earlier. Fuel dealers did best with a 24.8% July-to-July gain. Then came: lumber and building material dealers +13.3%; motor vehicles +12%; department stores +10.5%; hardware +9.6%; furniture, appliance +9.3%; variety stores +7.4%; shoe +6.1% and restaurants +5.6%. First seven months sales of all retail outlets up 7.4% to total $7,605 million.

There'll be more mink—in more tones—for milady this year. Forecast pelt production indicates an 8.3% increase over last year. And pastels and other mutations will take the spotlight, standard and silverblu the back seat. Of a total 849,000 pelts there will be 295,000 pastel (+21.4%); 182,000 other mutation (+38.9%); standard 261,000 (—2.9%; silverblu 109,000 (—22.1%).

Still lots of snap in house building. During the first seven months of this year: 67,675 new housing units were completed, 9% more than in same period last year; 74,531 units were started, about 100 fewer. At the beginning of this month, 84,606 housing units were under construction, 2.8% more than were a-building at the same date in record-setting '55.

Wheat exports up. During the week ending August 29, export clearances hit 6.6 million bu., sharply above the year-earlier total of 2.5 million bu. This brought August shipments abroad 23.2% higher than last August for a total 24.1 million bu. Canadian wheat still stored at month end amounted to 351 million bu., 5.3% less than a year ago.

Railway car loadings still show substantial year to year increases, although the rate of increase slackened somewhat toward the end of August. During the last 10 days of the month, number of freight cars loaded totaled 145,640, 8% more than a year earlier. August loadings as a whole ran 9.4% higher than a year before. This is below the year to date increase of 11.1%. Grain, iron ore and manufactured iron and steel products continue to set the shipping pace.

Major Weekly Indicators

	Latest Week	Week Ago	Month Ago	Year Ago
Department store sales, % ch. from year earlier	+5.8%	+6.7%	—2.3%	+10.7%
Carloading totals (cars)	‡145,640	93,859	88,269	‡134,885
Eastern Canada (cars)	‡ 91,426	60,561	59,011	‡ 89,102
Western Canada (cars)	‡ 54,214	33,298	29,258	‡ 45,783
Iron & steel (mfd.) (cars)	‡ 2,649	1,581	1,480	‡ 2,046
Ores, concentrates (cars)	‡ 20,282	13,279	13,177	‡ 15,938
Base metals (cars)	‡ 1,141	781	709	‡ 1,000
Lumber, timber, plywood (cars)	‡ 7,459	4,986	5,097	‡ 8,436
Cement (cars)	‡ 2,026	1,663	1,349	‡ 1,766
Passenger car production (no.)	713	2,475	4,290	599
Truck production (no.)	1,598	1,660	2,357	248
Bus. failures, 4-wk moving av. (no.)	22.3	22.0	19.8	13.0
Chartered Bank				
Personal savings ($ millions)	5,972	5,914	5,918	5,727
Loans outstanding ($ millions)	5,315	5,326	5,345	4,366
N.H.A. mtge holdings ($ millions)	432	429	415	187
Bank of Canada holdings of				
Securities ($ millions)	2,384	2,385	2,413	2,299
Short-term govern. ($ millions)	1,018	1,023	1,032	1,232
Long-term govern. ($ millions)	1,338	1,334	1,344	1,123
Other securities ($ millions)	12	12	22	51
Canadian dollars (U.S. cents aver.)	102.347	102.065	102.054	101.304
T.S.E. industrial index	477.43	483.15	490.15	452.88
Yield, 114 stocks	4.62%	4.55%	4.44%	4.07%
Bank Clearings				
Montreal ($ millions)	645	666	624	543
Toronto ($ millions)	882	687	938	677

‡ 10-day end of month period.

Facts by the Month

	Latest Month Available	One Month Previous	Two Months Previous	One Year Previous
WHAT WE PRODUCE—				
In all industries (Index)	298.4	283.2	277.1	276.8
In factors (Index)	304.1	288.7	268.3	282.9
Total nondurable goods (Index)	261.1	245.0	244.0	248.7
Food & bev. (Index)	274.2	237.6	229.2	265.1
Textiles (Index)	193.0	175.9	189.1	190.6
Clothing (Index)	153.4	157.6	160.1	140.6
Chemical products (Index)	317.4	313.1	313.0	305.6
Total durable goods (Index)	371.4	357.1	352.4	254.1
Iron & steel products (Index)	335.8	332.7	327.1	296.2
Primary iron & steel (Index)	421.8	418.8	396.7	375.7
From mines (Index)	274.2	253.9	234.5	254.1
Metals (Index)	154.0	146.4	129.1	145.4
Nonferrous smelting, refining (Index)	285.4	261.3	239.7	284.8
Gold (Index)	109.2	106.3	106.8	107.7
—From farms				
•Hogs graded (000)	523	458	494	497
•Cattle delivered (000)	169	138	136	165
• Flour (Index)	137.6	136.7	142.1	134.1
—From sea				
•East Coast catch ($000)	8,189	8,540	7,771	7,714
•W. Coast catch ($000)	8,893	3,163	1,670	5,070
—From forests				
Newsprint (000 tons)	536	551	518	502
Pulp (000 tons)	913	843	818	849
—In powerhouses				
•Electricity (Index) (seasonally adjusted)	328.0	323.9	317.4	290.2
WHAT WE SELL—				
•Retail sales ($ millions)	1,185	1,287	1,237	1,112
•Dept. store sales ($ millions)	78.8	99.5	102.9	71.3
Wholesale sales ($ millions)	694	718	638	624
•Mfrs. outstg. orders ($ millions)	2,725	2,815	2,845	2,559
•Pass. car sales (units)	42,076	48,874	53,790	40,000
WHAT'S ON HAND				
Mfrs. inventories ($ millions)	4,496	4,455	4,422	4,097
Dept. store stock sales ratio	2.8	2.9	2.6	2.8
SPENDING, SAVING POWER—				
Labor income ($ millions)	1,215	1,160	1,125	1,090
Dividend payments (Index) (annual rate)	303.4	301.8	301.5	268.8
JOBS—				
Persons with jobs (000)	5,739	5,647	5,499	5,588
Jobless seeking work (000)	102	117	165	150
Do (% of labor force)	1.7%	2.0%	2.9%	2.6%
CONSTRUCTION—				
Contract awards ($ millions)	390	392	321	269
FOREIGN TRADE—				
Exports ($ millions)	430	429	426	356
Imports ($ millions)	484	492	532	373
MONEY—				
Money supply ($ millions)	5,684	5,687	5,629	5,719
•Cheques cashed ($ millions)	17,853	16,855	18,296	14,222
•Life insurance sales ($ millions)	281	288	281	234
Notice deposits ($ millions)	6,340	6,329	6,399	6,184
Current public loans ($ millions)	5,294	5,288	5,163	4,193
PRICES—				
Consumer price (Index)	119.1	118.5	117.8	116.4

Index based: production wholesale sales 1935-39=100; consumer price index, 1949=100; manufacturers' inventories outstanding orders Dec., 1952=100.

STRATEGIC MATERIALS—Production and Supply—

	Latest Month	Month yr. ago	Yr. to date	% chge. yr. to date
•Steel ingots and castings (000 tons)	443	391	3,064	+21.7%
Primary copper (000 tons)	26.7	27.5	174.4	+11.4%
Nickel (000 tons)	14.5	14.8	99.6	+1.3%
Cement (000 bbls.)	2,782	2,253	13,791	+21.4%
Lumber (millions fbm.)	658	676	3,038	—2.7%
Lumber exports (millions fbm.)	300	396	1,577	—13.4%

•New item this week.

Date of issue for your file, The Financial Post, Sept. 22, 1956.

$1 Million Laurentide Acc. Stock Offered

MONTREAL (Staff)—An issue of 50,000 6% cumulative redeemable preferred shares, par $20, of **Laurentide Acceptance Corp.** is being offered by a syndicate headed by **Gairdner & Co.** at par to yield 6%. Proceeds will be added to company's general funds and used for general corporate purposes, including reduction of bank loans.

Shares are callable in part or in whole at par plus 5%. Company will set aside in a sinking fund an amount sufficient to retire $30,000 annually, beginning next May 1.

Before the end of this year, Laurentide proposes to offer to holders of the 25,000 5% cumulative redeemable preferred shares now outstanding the right to exchange their shares for 25,000 5% series cumulative redeemable preferred shares.

Net profit for the nine months ended June 30, 1956, was $237,613. In the last full fiscal year ended Oct. 31, 1955, net profit was $332,676.

While Laurentide's notes receivable have shown constant growth in dollar value, they only represent about 7% of notes outstanding in Quebec. "Current trends suggest that installment sales contracts meeting the company's requirements will continue to be available in such volume as to permit the company to employ profitably all its resources," it is stated in the prospectus.

Upon completion of financing, company will have outstanding $16,840,000 secured notes and short term loans, $2,148,000 debentures, $1.5 million preferred stock, 159,353 Class A n.p.v. shares, and 100,000 Class B n.p.v. shares.

114 Stocks Yield Averages 4.62%

The average yield on 114 dividend paying stocks on the Toronto Stock Exchange, as compiled by **Moss, Lawson & Co.**, on prices of Sept. 17, was 4.62%, up 0.07% from the previous week. The current yield compares with 4.44% one month ago and 4.07% in the corresponding week last year.

Here is the yield by the various groups:

	Sept. 17	Week Ago	Month Ago	Year Ago
	%	%	%	%
Common	4.10	4.02	3.94	3.81
Pfd. & A	4.79	4.68	4.67	4.06
Mining	6.10	6.07	5.86	4.88
Banks	3.12	3.09	2.99	2.84

You Need A New Topcoat!

You may not realise that you do, but you will as soon as you clap eyes on one of the finest collections of topcoats in Canada — at Simpson's, The Store for Men. Take, for example, this Crombie Sealskin, loomed in Aberdeen from the finest all-wool yarn. Pockets either slash or patch, and a choice of navy, grey, medium blue, or blue-grey.

Each, $75

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The Store for Men — Second Floor Dept. 260

Simpson's

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Bowater Profit Up 18% in '56

MONTREAL (Staff) — **Bowater Paper Corp.** consolidated profits (attributable to the corporation) for the first half of 1956 were $7,158,331, 18.3% higher than $6,052,070 for the whole year 1955. This year's interim statement is the first of its kind to be issued by the corporation.

Sales totaled $125,240,693, for the first half of this year as against $115,979,562 (one half of the total for the full year 1955).

Chairman Sir Eric Bowater told shareholders the interim financial statement shows a further over-all improvement in the earnings of the Bowater organization, with overseas subsidiaries contributing the major part.

He added that provided there was no further deterioration in the international situation, prospects for second half of the current financial year appeared to be satisfactory.

Company has declared an interim dividend on ordinary stock of 4½% (less British income tax) payable Oct. 29 to holders of record Sept. 15.

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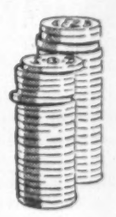

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In July, 1955, Orange Crush Limited introduced their new, King Size bottle in the London, Ont., market. Introductions quickly followed in Winnipeg, Vancouver, Toronto and Hamilton until King Size Crush became available nationally.

The "big gun" behind every one of the introductory "blitzes" was a short, but powerful, advertising campaign in daily newspapers.

Results were sensational. Scores and scores of new outlets were added to the list of retailers selling Orange Crush, and initial increases in sales of 150% to 250% were recorded.

Since the tremendously successful King Size Crush introduction, Orange Crush have maintained a steady campaign in daily newspapers. Today, the Company is happy to report an enviable national increase in sales.

This is due, in the main, to the unqualified success of attractive advertisements appearing regularly in daily newspapers.

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Better Hire Now Labor Tightening

(Continued from page 1)

in nearly every area except where automobile and farm implement lines are closed down. Chief shortages, as given by labor department: engineers, draughtsmen, managerial and secretarial workers, loggers, miners, some metal tradesmen, farm workers, waitresses and domestics.

Logging firms in Northern Ontario still got little or no response to requests for log-cutters which have been open for more than two months now.

British Columbia hit another employment record in August—for the third consecutive month. It had 19,000 more workers than a year ago and shortages everywhere.

Listed as worst shortages are: engineers, draughtsmen, metal and wood tradesmen, miners, loggers, construction workers (for out of town jobs), auto mechanics, practical nurses, and some types of office, service, and farm workers.

Manufacturing Records

Quebec is approaching 1953 records in manufacturing employment and expects to need even more workers for manufacturing during the fall.

Employment in electrical apparatus was up by 18% over any previous level, and in iron and steel products by 11% over last year.

Total workers are about 20,000, or little more than 1%, above last year's level.

Bushworkers are still unobtainable, though once the harvest is over there may be a better chance of finding some.

The labor department reports scarcity of skilled workers, specially in forestry and construction, but says that demand and supply of general laborers is in better balance than for some years.

In the **Atlantic Region**, as in the Prairies, the harvest brought some switch of workers from other occupations, notably logging. They should be going back this month.

Even in August there was no single area with any surplus of labor, though total workers were 17,000 — or more than 3% above last year.

Worst scarcities: construction and forestry.

Hope Eisenhower Can Stall U. S. Restrictions on Fish

(Continued from page 1)

rosefish) have been finding it hard to make a living because, they say, of Canadian competition.

Their difficulty really results from (a) their growing shortage of near-at-home fish, (b) higher labor costs, and (c) their relative inefficiency.

2. They've asked for more protection. At present they're protected by a tariff of 1⅞c. lb. on imports up to 15% of the average of the past three years, 2½c. lb. on the rest.

3. Several surveys have been made. The last one, in 1954, by the same commission, recommended (a) a straight 2½c. tariff on all imports, and (b) that imports be limited to 37% of the previous five-year average consumption.

4. President Eisenhower — in whose power it is to implement the recommendations, modify them or ignore them—did nothing. He did nothing because he wanted to see what the effect would be on the New England situation of the very fast-growing fish stick industry.

New Demand

He thought it might open up new demand, help New England fishermen.

New demand has been created and the market has grown. (And the U. S. fish-stick manufacturers who are looking for cheap fish are on the side of our Maritime fishermen.) But the plight of the New England fishermen has remained.

It's presumed here that the recommendations will be the same as they were in 1954.

By law, President Eisenhower has 60 days in which to act.

But the U. S. elections are due three weeks after the recommendations must be published. And there will be great pressure on the President to do something for New England, particularly since the re-election of a Democratic governor this month in Maine.

But the U.S. tariff on the fish imports is now bound at its existing level as part of the latest tariff bargain. If the U. S. tries to use the GATT escape clause, it has to offer Canada a corresponding concession.

Ottawa doesn't know of any concession that could compensate the Maritime fishermen for what they would lose.

One thing is sure: Canada will make the strongest protests against any change which would involve a quota on Canadian fish.

It's thought here that if the President doesn't do anything to harm the Canadian industry—his record has been remarkably good in general so far — before the election, he won't do anything afterward.

If Adlai Stevenson is elected, it is conceivable that he might feel tempted to put into effect at least a modification of the anticipated recommendations, although the Democratic party is the traditional low-tariff party.

Gas vs. Oil Market Fight

(Continued from page 1)

vising potential customers that the trend in gas rates over the next couple of years will most likely be downward as market volume builds up.

On the other hand they see an increase in price of crude oil — from which fuel oil is recovered — as virtually inevitable over the next year at least. Any major interruption in Middle East oil deliveries and/or rerouting of shipments around Cape of Good Hope could touch off the price increase a lot sooner.

Even a 25c-a-barrel hike in crude oil could boost fuel oil ½ to 1c per gallon. Any such price hike in competitive fuel oil would definitely swing the househeating cost advantage their way, the gas people claim.

(Advertisement)

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Suez Oil Crisis May Speed Trans Mountain Expansion

(Continued from page 1)

whether O.D.M. or a committee of British-U. S. shipping companies and tanker owners—would likely insist that many of the tankers now carrying Middle and probably Far East oil to California—including tankers owned by large U. S. oil companies—would be diverted to the Western European haul exclusively.

California then would have to replace these imports—which averaged 154,000 b/d in first six months of 1956, 114% higher than in same period of 1955—by boosted production from its own dwindling fields and/or imports from Canada. Actually Canadian shipments to California, which got underway on a spot basis this year for the first time, will have amounted to close to 3.5 million bbls. by end of this month. (They averaged 30,000 b/d during August).

The extent of the additional market for Canadian oil to grow out of the Suez situation will depend on a number of factors, particularly on likely duration of the Suez closedown.

Western European importers have been building up oil stocks in anticipation of just such an emergency; U. S. and Canadian importers of Middle East crude could easily carry on with current stocks for a few weeks at least. In the final analysis, Trans Mountain oil pipeline officials may have to decide whether the chance at a much bigger California market justifies a major expansion program now.

But even if an expanded Californian market failed to materialize out of the current Suez crisis, Canadian oil officials see a big three years in the U. S. Pacific market growth over the next Northwest. Four more refineries planned for Washington state, close to the terminus of the Trans Mountain oil pipeline spur, would represent an increased refinery market for some 110,000 b/d. Outlook is that major portion—if not all—of this market would swing to Canadian oil. Right now Prairie oil is supplying virtually the entire requirements of the two refineries operating in the state.

Standard Oil Co. of California plans a start next year on its proposed $75 million, 60,000 b/d refinery near Everett, Wash. The Texas Co. plans early construction start on a 30,000 b/d refinery near Shell Oil's 50,000 b/d Anacortes refinery. Two smaller refineries are also planned by U. S. Oil and Refining (near Tacoma) and Straits Refining Co. (on Puthe traditional low tariff party.

It now looks as if all these refineries would be in operation by 1958 or early 1959. Since the expansion being considered by Trans Mountain—it would likely involve construction of some seven new pumping stations — would take at least a year to build, an early decision on the timetable is necessary.

Stock Delisted, TSE Studies Morrison Brass

Removal of **Morrison Brass Corp.** shares from trading on the **Toronto Stock Exchange** at mid-week resulted in a drop in share value from about $6⅜ to a $4⅞-$5½ range on the over-the-counter market. Sales were made at $5.

TSE gave no reason for its move, announcing simply that "trading in the shares of Morrison Brass Corp. has been suspended pending the completion by the Exchange of an investigation of the affairs of the company."

The Exchange, under its by-laws and listing agreements, has the power to suspend trade or delist an issue at any time without giving any reason.

Officials of Morrison Brass could not be reached for comment at mid-week. J. C. Cragg, who was elected chairman following a change in control of the company (FP, May 12) was out of town and other officials refused to discuss the TSE move.

S. J. Randall, a vice-president, disclosed that he had resigned from the board about a week before the suspension action.

Since sale of control in the long-established valve firm, Morrison Brass shares have been active stock market features. They climbed from a $6¼ level in April before the control switch to a high of $10 in mid-August, dropping back to present levels since.

Although reporting a consolidated net loss of $431,913 in 1955, operations are reported to have improved considerably, with a net profit of $39,369 in the first five months of 1956.

The change in control resulted from sale of 1,250,000 shares at $4 a share to **Acme Subdivisions Ltd.**, a Toronto real estate firm. It is understood that Acme Subdivisions was acting for U. S. interests who control several U. S. firms.

In June, Morrison Brass reported acquisition of three U. S. firms, **L. B. Lockwood Co., Lake City Malleable Co.,** and **Cambridge Glass Co.** (FP, June 9).

It has since been reported that Morrison Brass paid a total of $5 million for these companies. This is the same amount received by Morrison Brass for the shares it sold to the new interests.

Rumors on Bay Street indicate that Exchange officials are concerned over changes in assets of Morrison Brass which are not clear and which might affect shareholders. TSE regulations specify that listed companies must give satisfactory details of financial affairs, or any actions which might affect shareholders.

Here's How Today's Boom Adds To Amounts We Owe

(Continued from page 1)

imports; only about two thirds from Canadian production.

—For every $4 Canadians earned abroad, we have been spending $5.03 abroad.

—The gap between what we've been earning abroad and what we've been spending is now more than one quarter of our current earnings.

—The current deficit is now as large a proportion of our foreign trade at it was in 1930. To find a larger, you must go back to the pioneering days before the First World War.

—We may match 1929 in another way. This is the first year since 1929 that new physical investment has come so near to being one quarter of the total national output. It got near to 24% in 1953. This year it looks as though it may reach the full 25%.

—Labor income — running at mid-year 11½% ahead of mid-1955 — made a near-record increase between the first and second quarters of this year. It rose by 5½% in that short period. Last equally sharp rise was at the end of 1950, in the first flush of the post-Korean boom.

—Employment, which increased by 3%, accounted for more than half of the increase, but average pay was up sharply too.

—Investment income in the second quarter was just over 11½% above year previously.

—Higher prices accounted for a substantial part of the 11% increase in gross national product between mid-year 1955 and mid-year 1956. The over-all increase in volume of output was not much above 6%.

—Accumulation of business inventories is estimated to have been at an annual rate of $1,272 million in the first quarter and $744 million in the second. These are much higher rates of inventory-accumulation than we have had since the post-Korean boom. But they are well below the hectic 12 months from September, 1950 to September, 1951 when the pile-up averaged out at the rate of $1,700 million.

—New money coming into Canada for direct investment in foreign-owned plants established a new record in the second quarter, at $140 million. Total for the first half year was $250 million, well above the record inflow of 1953 which came to $426 million for the whole year. 35% of it came from overseas; 65% from U. S.

—By contrast with last year, 80% of the record deficit on current account was covered by long-term capital. Last year short-term movements (e.g. the accumulation of Canadian dollars in non-residents' bank accounts) accounted for more than 40% of the capital inflow.

—Besides the massive deficit on commodity trade — $400 million more than last year, on the first six months alone — we ran a slightly larger deficit on other transactions as well. Chief among these was the growing deficit on travel account. It came to $150 million in the first half of the year. The third quarter, when most U. S. tourists come to Canada, should correct this a little, but the balance of travel spending is more against us than ever.

Cdn. Hydrocarbon Purchases More Propane Firms

Canadian Hydrocarbons Ltd., Winnipeg, has substantially expanded its fast-growing propane empire in Western Canada through purchase of **Sturdy Propane Ltd.**, Calgary, **Hugh Gas Ltd.**, and **Propane Gas Services Ltd.**, Cranbrook, B.C. from **International Utilities Corp.**

This will give Canadian Hydrocarbons propane operations stretching from Fort William to B. C., representing an annual market of around 40 million gal. and a gross investment of close to $12 million.

Look For It Here

September 22, 1956

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Auto Production

	Wk. End Sept. 15	To Date 1956	To Date 1955
Am. Motors:			
Hudson	....	1,156	1,027
Nash	....	2,907	1,791
Total cars	....	4,063	2,818
Chrysler:			
Chrysler	....	5,042	....
Desoto	....	1,398	....
Dodge	....	34,988	....
Plymouth	....	30,237	....
Total cars	....	71,665	64,317
Dodge	209	4,962	....
Fargo	143	4,306	....
Total trucks	352	9,268	6,751
Cars, trucks	352	80,933	71,068
Ford:			
Ford	[illegible]60	52,408	....
Mercury	....	6,251	....
Meteor	60	24,078	....
Monarch	....	6,693	....
Total cars	220	89,430	92,659
Ford	306	15,503	....
Mercury	147	6,287	....
Meteor divy.	....	496	....
Total trucks	453	22,286	19,068
Cars, trucks	673	111,716	111,727
G.M.:			
Buick	56	14,738	....
Chevrolet	408	48,619	....
Oldsmobile	17	7,968	....
Pontiac	12	32,974	....
Total cars	493	104,299	128,157
Chevrolet	259	17,039	....
GMC	268	12,077	....
Pontiac divy.	....	1,053	....
Total trucks	527	30,169	28,794
Cars, trucks	1,020	134,468	156,951
International:			
Trucks	266	11,456	5,993
Stude.-Pack.	....	6,772	6,940
All cars	713	276,229	294,649
All trucks	1,598	73,179	60,848
All vehicles	2,311	349,408	355,497
Last week	4,138	....	....
Last year	[illegible]	[illegible]	[illegible]

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Provinces To Trade Data

(Continued from page 1)

provinces except Prince Edward Island also discussed a proposed change in U. S. securities regulations which would demand earnings figures from companies seeking to sell stock in the U. S. under a simplified form of registration.

They felt that such a change would make the "short-form" of registration worthless to Canadian companies since almost all Canadian firms seeking to take advantage of this are mining or oil firms in the very early stages of operations.

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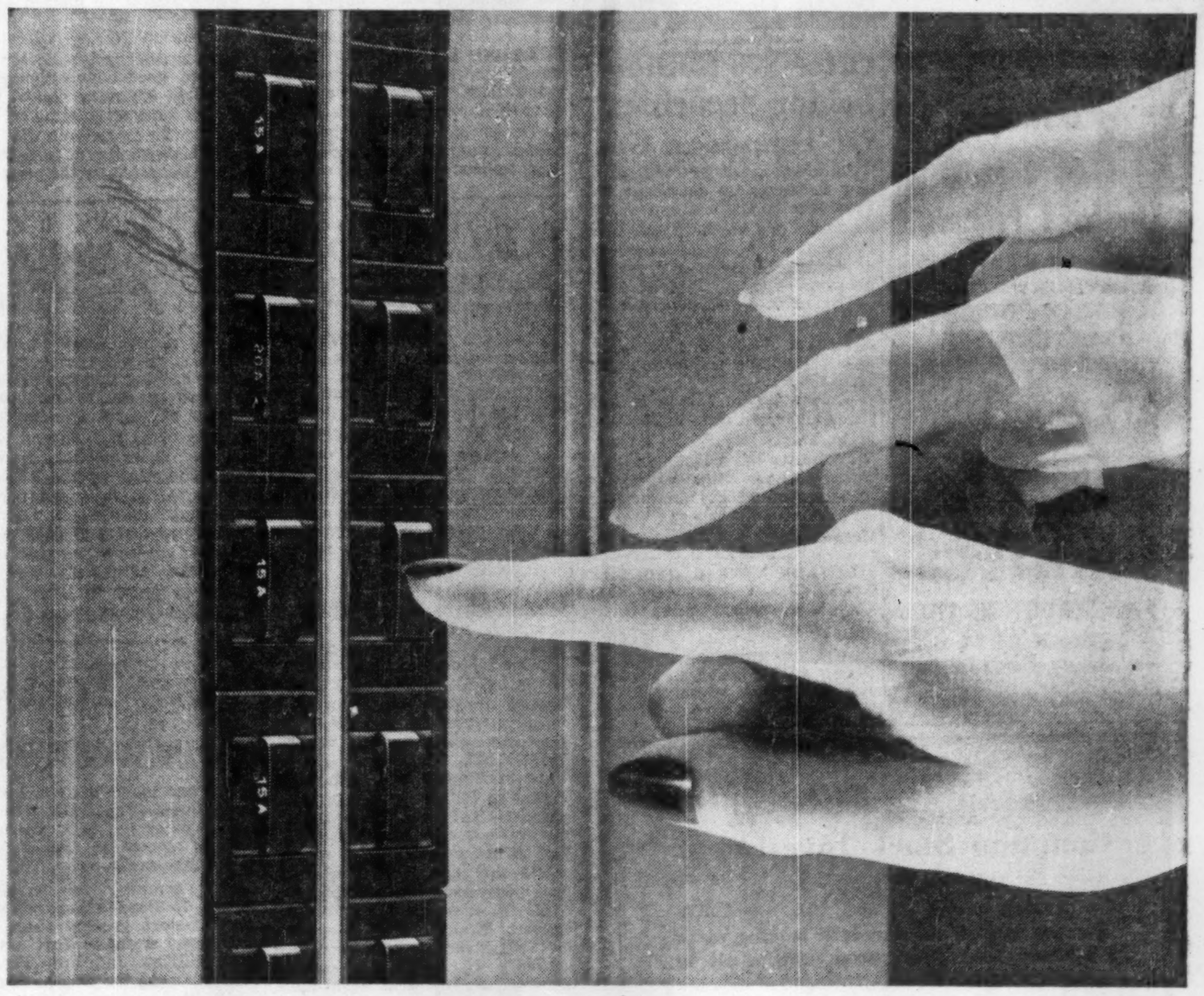

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ANNOUNCEMENT

CANADIAN BANK OF COMMERCE DIRECTOR

M. WALLACE McCUTCHEON, C.B.E., Q.C.

The Canadian Bank of Commerce announces the election of Mr. M. Wallace McCutcheon, C.B.E., Q.C., of Toronto to its Board of Directors. Mr. McCutcheon is Vice-President and Managing-Director of Argus Corporation Limited, Chairman of the Board of St. Lawrence Corporation Limited and of The National Life Assurance Company of Canada, a Director of Canadian Breweries Limited, Massey-Harris-Ferguson Limited and a number of other companies.

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PRICES

(See business trends, p. 2)

Tin, as high as $1.10 lb. with Suez scare, fell off to $1.06¼ lb. at midweek. July minimum was 94½c. Buyers believe it won't drop below $1 again for a long time.

Copper, fluctuating jerkily in London in response more to war fears than shipping troubles, hit £313 before dropping to £304 as week started and £302.10 at midweek. Domestic price steady at 40c. lb. from major producers and 39c. from custom smelters.

Rubber, inching up slowly in response to Suez, reached 33½c. lb. this week for No. 1 ribbed smoked sheets. U. S. synthetic production seen stabilizing factor.

Wool markets firm with temporary scramble as prices climb slowly. Last two months have seen 2%-5% increase.

Cotton yarn expected to rise 2c.-3c. lb. in fourth quarter. Some good quality combed yarns already up 1c.

TV sets hiked 2.7% to 4.3% on most of its current line of 21 in. receivers by **Canadian Admiral Corp. Ltd.,** effective Sept 17. High labor and material costs blamed.

Offer $70 Million Senior Securities Of Tennessee Gas

An offering of $70 million in new financing by **Tennessee Gas Transmission Co.** was expected to be made this week in the U. S. Proceeds will be used for payment of short-term notes and for expansion.

The offering will include $50 million 4¾% debentures due 1976, offered at 100.65 to yield 4.70%, and $20 million convertible preferred stock.

Underwriters are Stone & Webster Securities Corp., White, Weld & Co., and Halsey, Stuart & Co.

Tennessee has a 17% interest in **Trans Canada Pipe Lines Ltd.** and has proved gas producers in its extensive holdings in Western Canada.

CANADA WIRE & CABLE CO. had 618 Class A shares and 1,043,820 Class B shares outstanding at Aug. 31.

BRITISH AMERICAN OIL CO. during August issued an additional 1,500 shares from treasury. Now 10,095,650 common shares outstanding.

Why They're Moving

Facts and comment on what's going on in the market and rumors behind some of the moves.

By FRANK KAPLAN

The brightening outlook for Canada's grain-growers is resulting in mild improvement in share prices of some companies which handle or process grain. Grain stocks tended to hang near their lows for the year for some time, but upturn signs appeared a little over a month ago. Previously, these issues sagged almost without interruption from the early fall of 1955. Reasons for the downward pressure were well-known. Canada had built up a large stock of wheat and was having trouble moving it into world markets either as grain or as flour.

But recent government reports indicate a fairly heavy flow of grain to export markets resulting in improved farm income, more rapid turnover at elevators and the current firmness in share prices. Here's how shares of some of the companies have moved.

	Latest Price	End July	End 1955	1956 High	1956 Low
	$	$	$	$	$
Maple Leaf Milling	8⅛	8½	9½	10	8
Ogilvie Flour	39	42½	51½	52	37½
Federal Grain	31	30½	34½	36	29½
Midland & Pacific	19	19½	19	20½	19
Toronto Elevators	21¼	21	16¾	24	16¼

* * *

THE STREET IS TALKING ABOUT — the growing degree of nervousness apparent among investors who have been watching Wall Street lead stock prices steadily lower. Some dealers report this nervousness being reflected in profit-taking by otherwise long-run holders. And, as this mild selling occurs, buyers continue to stay away.

Good gains have been rare. **McColl-Frontenac** is a strong spot with an advance of $4½ at $64, from $59½, mostly in anticipation of what might be ahead for the **Texaco**-owned company since Texaco acquired Trinidad Leaseholds of the U. K. Through Trinidad, Texaco has **Regent Refining** which adds a fraction at $23¼.

* * *

But the biggest buzz on Bay Street is created in a "one-day wonder" move in **Trans Mountain Oil Pipe Line.** Stock slumps to $73¾ low from $80 before recovering to $77. Reason for a sharp burst of selling was a well-talked rumor that company's throughput is falling sharply to 105,000 to 107,000 barrels. Fact is that some 157,000 barrels of oil daily passing through line this month. Incorrect report rumored originating from former bullish interests who had liquidated and were short stock.

Toronto Stock Exchange short position report at beginning of month showed 525 shares short, first time Trans Mountain had appeared in list since May and biggest amount since July, 1955.

* * *

Consumers Gas another bright spot with climb to $25¾ from $25 as company reports 75% increase in gas sales in first nine months of year. Company general manager says he anticipates present 20-cent quarterly dividend rate to remain unchanged for the present. Consumers is hard at work developing natural gas markets in the Toronto area and is cutting prices in an effort to make the fuel more attractive.

On the other side of business news picture is evidence of the squeeze being exerted on profits. **Canadian Breweries** reports an 18% increase in sales in the first nine months of the year but earnings per share slip to $2.03 from $2.39, reflecting slight dip in total profit and more shares outstanding. Stock at $26⅝ is down from $28 recently.

* * *

Craig Bit climbs to $7¼ from $6⅛ as company announces increase in profit to 83c a share from 56c a share for year ended June 30. Company also plans a two-for-one stock split . . . **Famous Players** loses a fraction at $17½ as semi-annual statement shows lower earnings. However, a bright side is improved business in key theatres.

John Inglis settles quietly to a new low at $8¼ for a loss of about $2 in two weeks as liquidation from former U. S. buyers continues. Stock has come down steadily from a top of about $16¾ after strong U. S. demand had resulted in sharp rise . . . **Dominion Stores** another relatively-steep loser with a drop to $38 from $43 earlier this month. No reason apparent and trading light . . . **B.C. Power** at $46, compares with $46¾ as company puts 200,000 shares on market at $46 to B.C. residents only.

* * *

OTHER MARKETS — Over-the-counter dealing practically at a standstill. Insurance stocks still sliding in quotations although no trade. Decline is in line with drop in U. S. insurance issues since most of buying in Canadian life stocks has been originating in U. S.

British and European investors also staying away from the stock market. Some interest appears in **Inland Natural Gas** at $7¼-$8 but most traders appear to be waiting for new financing by the company.

O.S.C. Probes False Report On Trans Mountain Pipe Line

A sudden wave of selling that pushed the price of **Trans Mountain Oil Pipe Line Co.** shares down from $77.50 to a low point of $73.75 in a single session has resulted in an investigation by the **Ontario Securities Commission.**

In total turnover of some 4,500 shares, Trans Mountain moved between the $77.50 to $73.75 range before finishing at $75 on Friday, Sept. 14.

The selling seems to have been touched off by a comment in a securities advisory letter which said:

"Due to the loss of markets in the U. S. Pacific Northwest served through the company's west coast line, throughput in September was cut to 105,000-107,000 bbls. daily from 158,500 bbls. in August and further decrease in October might be anticipated. This will have a substantial effect on earnings. Until this situation changes, I recommend that clients take at least half their accumulated profits."

However, this report proved incorrect. Trans Mountain officials in Vancouver reported a record delivery in August of 153,448 barrels daily with scheduled throughput for September at 157,000 barrels daily.

This official report from Vancouver resulted in a surge of buying in Trans Mountain shares which at mid-week had climbed back to $77 and had touched $80. Highest price touched by Trans Mountain this year was $85 and the low was $44⅛.

The securities advisory service sent out a report this week noting that its first comment was incorrect "even though it came from the same source which has been so reliable over the past year." This report added: "The reason for the misinformation is not known." And it recommended repurchase of the shares by its clients.

Rumors circulating on Bay Street indicated that a former heavy buyer of Trans Mountain had been selling the shares "short." That is, Trans Mountain shares were being borrowed to be sold in the hope that the price would decline so that stock could be purchased at a lower price and the "short position" covered.

The Toronto Stock Exchange semi-monthly short position report for the end of August showed 525 shares short on Trans Mountain Oil. This was the first time since May that this issue had appeared on the report and the number of shares borrowed was the largest in more than a year.

A new short position report is being compiled by the TSE and is expected to show more shares borrowed.

Also, there is talk that bullish interests are trying to push down the price of Trans Mountain shares in order to later quietly accumulate lower-priced stock.

Stamp Traders Move Westward

The first move westward in the **Gold Bond Stamp Co.,** Minneapolis, program of introducing trading stamps to Canada took place this week.

The company is supplying stamps to **Canada Safeway Ltd.,** the 151-store grocery chain.

Safeway stores in Port Arthur, Fort William and Port Frances began issuing the stamps at midweek. The question of extending the scheme to other Safeway stores is now being studied.

"Our purpose in adopting trading stamps is to meet competition now using premium certificates, car giveaways and other promotions," said W. P. Griffiths, Safeway zone manager.

Gold Bond's operations in Canada have so far been confined to a group of **IGA** grocery stores in the Ottawa Valley. But the company has stated its intention to expand coast-to-coast, and not necessarily only in grocery stores. Drug stores and service stations may prove suitable.

Canada Safeway, whose sales exceeded $140 million last year, is the subsidiary of **Safeway Stores, Inc.,** Oakland, California, one of the top 10 U. S. food chains.

Until recently, the parent company and the **A & P** chain were the only leading food chains in the U. S. not using trading stamps.

A few weeks ago Safeway Stores introduced a small stamp plan into its stores in one part of California. The plan is a local one called Blue Chip.

Interprov. Bldg. Credits May Make Rights Offer

Interprovincial Building Credits Ltd., Toronto, may make a rights offering of about 50,000 common shares to holders of present stock.

Company is considering issue of the remaining treasury shares of the 300,000 authorized. At last report there were 202,810 outstanding.

Of the 167,000 treasury shares previously available, **Mercantile Credit Co.,** London, Eng., has purchased 70,000 at $12.50 for about $875,000 (FP, Sept. 15). The A and B warrants attached to outstanding sinking fund notes carry rights to 35,885 shares and 9,800 shares are reserved for staff options. Should there be a rights offering of the remaining 51,505 shares, and all warrants and options exercised, all 300,000 authorized shares would be outstanding. Of this, the U. K. firm's interest would amount to 23.3%.

At a special meeting on Oct. 9 shareholders will be asked to approve an increase in the board to 14 members to include two nominees of Mercantile Credit. It is understood that the two nominees will be Richard B. Hurton, managing director of Mercantile, and E. J. T. Goudie, a director.

On Sept. 22, directors will consider the proposal to issue additional shares under a rights offering.

Volume of business in the six months ended Aug. 31 was 43% above the first half last year and net profit was up 42% at $124,557.

Offer British Columbia Power Common Stock At $46 a Share

MONTREAL (Staff) — An additional 200,000 common shares (no par value) on **British Columbia Power Corp.** are being offered at $46 per share by a syndicate headed by **Nesbitt, Thompson & Co.** and **Wood, Gundy & Co.** The offering will increase to 3,761,535 the number of company's 5 million authorized common shares will be outstanding.

The whole or a substantial part of the proceeds derived from the issue will be used in payment for purchase of common shares of a subsidiary, **British Columbia Electric Co.** It is probable that a part, which may be substantial, will be made available for use by another subsidiary, **Western Development & Power Ltd.**

The latter company was formed recently to develop the hydro-electric power potential of the Fraser and Columbia rivers. At the time of its incorporation it was reported Western Development would also study industrial opportunities in these areas and might even participate in financing of new industries.

Capital Expenditures

B. C. Electric and its subsidiaries have been engaged in a substantial expansion program for the past several years. Capital projects scheduled for the last five months of this year call for expenditures of $49 million. This will be met in part from the company's general funds (which at July 31, 1956, were about $31 million) supplemented by approximately $6 million expected to be derived during the last five months of this year from the business of the company and its subsidiaries, as well as the proceeds from sale of $2,050,000 principal amount of 4¼% first mortgage bonds sold in 1956 but not yet issued as at July 31.

Proceeds of the sale of the current additional issue will be added to the general funds of B. C. Electric Co. and will be used in financing capital expenditures. Because of uncertainties in delivery dates and construction capabilities it is estimated that some of the capital expenditures scheduled for 1956 may not be made until 1957, in which case proceeds would not be required until that time.

However, it is expected that in either event proceeds would be required for capital expenditures and/or the purposes of Western Development & Power Ltd.

B. C. Power Corp. consolidated earnings from operations and miscellaneous income before depreciation, income taxes, interest or dividends on prefered shares, was $21,830,113 for the first seven months of 1956.

Consolidated earnings for the full year 1955 were $33,254,999. Company's consolidated earnings on common shares for the first seven months of this year amounted to $5,218,570. Earnings on common shares for the full year 1955 were $6,956,095.

Consolidated balance sheet at July 31, 1956, shows current assets of $51,881,194, against current liabilities of $34,333,444. Total assets were $410,098,631. Bond debt of company and its subsidiaries at July 31 was $185,382,528.

$1.5 Mill. Motor Products Preferred Issues Offered

An offering of $1.5 million cumulative redeemable preference shares, $100 par, of **Motor Products Corp. of Canada,** Walkerville, Ont., is being made at par by **Harrison & Co.,** Toronto.

Expected later this year is an offering of $1.1 million 5½% first mortgage sinking fund bonds, due Oct. 1, 1976, and $1.2 million 6% sinking fund debentures, due Oct. 1, 1981.

Present offering consists of $1 million 6% Class A sinking fund shares and $500,000 6¼% Class B convertible shares. Each A and B share carries a bonus of two common shares to yield 6% and 6¼% respectively. Redemption price is $105.

The A stock sinking fund payments begin Oct. 31, 1957. Each B share is convertible into common stock on basis of 12 common shares to Sept. 1, 1958; nine common shares to Sept. 1, 1960; seven common shares to Sept. 1, 1962; and four common shares to Sept. 1, 1966.

Net profits of the Canadian division for the years ended June 30 were as follows: 1956, $630,257; 1955, $297,064; 1954, $520,424; 1953, $631,373; 1952, $635,329; 1951, $943,979; 1950, $862,423; 1949, $750,580; 1948, $399,951; and 1947, $336,991.

This summer **Masters, Smith & Co.,** Toronto, purchased the business for $3,765,000 from **Motor Products Corp.,** Detroit, Mich., which operated it as its Canadian division (FP July 14). Company manufactures a wide range of automobile parts.

Capitalization outstanding upon completion of current financing and proposed bond issue later this year will include $1.1 million 5½% first mortgage sinking fund bonds, due Oct. 1, 1976; $1.2 million 6% sinking fund debentures, due Oct. 1, 1981; 10,000 6% cumulative redeemable sinking fund Class A preference shares, $100 par; and 5,000 6¼% cumulative redeemable convertible Class B preference shares, $100 par; and 350,000 common shares, no par.

Company's directors are: C. T. Smith, chairman; Daniel Robertson, president; W. W. Thatcher, executive vice-president and general manager; W. O. Reevely, vice-president in charge of manufacturing; P. W. Edmunds, treasurer; H. H. Lawson, G. K. Masters, Ray Nigro, and D. S. Rattray; directors. F. A. Hull is general sales manager and D. A. Berlis, secretary.

Toronto To Have Computing Centre

A computing centre equipped with a Univac 11 digital computer system will be opened next fall by **Remington Rand** in Toronto. The installation will be on the bottom floor of the company's Bay St. building.

Already several Canadian insurance companies have shown an interest in buying the service that the centre will make available. Two of the leading insurance companies have ordered their own Univac 11 systems.

Similar Univac centres have already been installed in other countries.

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We have prepared a memorandum on Western Plywood Company Limited and its Class "B" Shares, and shall be glad to furnish copies on request.

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Try This Trust Test!

1. **Unless certain precautions are taken the uncollected accounts of persons engaged in professions become taxable income in the year of death.** *True* ☐ *False* ☐

2. **In the event that a wife dies without a Will, the husband receives the entire estate.** *True* ☐ *False* ☐

3. **A "Trust Will" is one whereby the principal beneficiary receives an interest for life with a gift over to a second person on the death of the life tenant.** *True* ☐ *False* ☐

4. **Outright gifts made by a person less than three years prior to death are subject to Succession Duties.** *True* ☐ *False* ☐

5. **Every trust company must have an official guardian on its staff.** *True* ☐ *False* ☐

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1. True 2. False 3. True 4. True 5. False

Complete explanations of these answers will be supplied upon request

INTEREST RATES By PAUL E. DEACON

What's The Danger Point?

Bond Prices May Be Near Bottom, Say Some Dealers

One of the main issues raised by the Federal Government's recent 41½-year bond issue offered at a price which would yield 3.90% to maturity, was what significance this might have as a clue to future trends in interest rates.

There was a large body of opinion in the investment community that interest rates were going higher still. This feeling was one reason why only $250 million of the $350 million offering was sold.

Bond market action since the issue has given some confirmation. Prices are slightly generally lower than they were late in August when the Government issue was made.

But there is no unanimity among investment men that future drops are inevitable, or likely to be significant.

Firm's View

A letter just issued by a Toronto investment house, **E. M. Saunders Ltd.**, cites several arguments favoring the view that bond prices may be near their bottom.

The Saunders firm points out that the level of employment may be the principal determinant of interest policy by the central banks here and in the U. S. "We question whether any central bank's guess as to its monetary policy five, 10 or more years hence could categorize 3.90%, 40-year borrowing as 'cheap money' ", it contends.

"A further rise in government interest rates might produce a scale of secondary municipal and mortgage rates so high that they would jeopardize principal, and more borrowers would be denied **any** access to funds. Municipal public works and house building have a definite social (if unproductive) value in the economy. The general public is aware to an increasing extent that the cost and availability of money is largely determined by the monetary policy of the Bank of Canada, with the acquiescence of the Government.

"The authorities are aware that there is a point where monetary policy could 'lock the brakes' on the boom, and its reactivation (witness the 1930s) by subsequent cheap money is not assured if public psychology becomes very bearish.

"At some level, essential development is harmed by the inflation of debt service charges, a matter of more concern to our economy than to other, more mature nations. The authorities probably have a good idea as to the danger point which limits the raising of interest rates.

"We suspect the danger point is sufficiently close to present yield levels that 3.90% borrowing for 40 years is not in anticipation of subsequent higher costs (of borrowing)."

Number One Problem

This problem of deciding just where the danger point in interest rates is, or where central monetary authorities believe it is, is probably number one among those faced by people investing money now.

Stock buyers are worried because they fear authorities may put the danger point too high, and thus cut business back so sharply that it will have a tough time recovering. Even at present interest rate levels, they expect lower earnings, some reduction of potential growth. And they have to pay enough on margin loans themselves that some of their own stock purchase plans are unboubtedly being revised.

Rumors are current that even an increase in margin requirements may be under consideration in Canada, to add weight to the effect of the increase in interest rates on margin loans (6¼% now against 5¼% early this year). It's doubtful whether margin is playing a big part in present markets, in relation to total holdings, but all money is tight and it might be argued that other loans were more essential to the economy. On the other hand, the maintenance of a respectable level of demand for securities (including speculative ones) is surely necessary to keep business on an even keel too.

No Reason For Switch

In any case, the inflationary pressures are still present and business is still good. While this continues, there seems no reason for a switch to easier money. But unless present anti-inflationary measures aren't enough and the boom gets out of hand, there appears to be a good case for expecting that the limit on big increases in interest rates can't be far off.

Even at present levels, borrowers are having to think twice about going ahead with projects. Financing plans are being changed, involving reductions in amount and sometimes abandonment of the whole scheme.

More Current Accounts When Cheque Fee Upped

What Chequeing Costs You

Quarterly Minimum balance	No. of cheques written	Savings Account Cheque charges	Net cost or income, after free cheques & interest	Current Account Net cost (no interest and one 10c deposit charge)
$	$	$	$	$
50	10	1.50	—1.19	—1.10
200	15	2.25	—0.70	—1.60
600	20	3.00	+1.65	—2.10
1,000	30	4.50	+3.25	—3.10

By DALTON ROBERTSON

After Oct. 1 it's going to cost you more to write a cheque.

Service charges on savings accounts have been boosted from the existing 10c per cheque to 15c. And the cost of writing a cheque on a current account has been increased from 8c to 10c.

These higher charges are designed to offset the costs of handling the increasing number of cheques people are writing, say bankers. The new charges are in line with increased costs of staff and business operation today.

But of special note in the move is the widening of the difference between the cost of cheque-writing from a savings account and from a current account. Although bankers are reluctant to say "you should have a current account, not a savings account," the fraternity would be happy to see more current accounts in cases where customers are making frequent withdrawals.

On the whole, it's easier and a little less costly to look after a current account. It's designed for cheque-writing whereas savings accounts are supposed to be for savings. But many people use a savings account as a checking account. For those who do, the new cost difference may encourage some switching.

Savings accounts bear 2½% interest calculated on the minimum quarterly balance. These also allow one "free" cheque for every $100 held in the account during the quarter. Every cheque written after the free one costs 10c now, 15c after Oct. 1.

No Interest

Curent accounts on the other hand bear no interest. There is a flat charge of 8c — after Oct. 1, 10c — on every cheque written. It also costs 10c to make a deposit — although for every $50 held in the account during the month, one deposit without charge is permitted. At the end of each month, a bank will, upon request, render the current account holder a statement together with cancelled cheques.

Whether it is financially more advantageous to have a current account rather than a savings account depends on the balance that is maintained and the number of cheques written. Under the new rates, the man with the small savings account who writes a lot of cheques will find, interest or no interest, it's cheaper to have a current account. As the minimum quarterly balance increases, the savings account becomes more attractive.

For some time the banks have been unhappy about seeing savings accounts turned into what amounts to checking accounts. But they recognize that for those who hold substantial cash balances in them, interest earnings more than offset cheque charges.

In an attempt to keep savings accounts and checking accounts separate, several of the banks have been looking at the possibility of devising a new type of account. This is still very much in the exploratory stages.

Such an account would be essentially a checking account, but in terms of net advantage it would likely be closer to the savings account than to the current account. One suggestion is that this new account would bear no interest, but cheques would be sold at a price probably lower than today's charge to the customer.

In this way there would be no administrative expense in keeping track of the number of cheques written and the charges involved.

Trading Hours Are Advanced

Investors using Canada's major stock exchanges will set their alarm clocks an hour earlier during October, when trading hours change.

The Toronto, Montreal and Canadian Stock Exchanges will change their trading sessions to 9 a.m. to 2.30 p.m. when the two cities revert to Eastern Standard Time Sept. 30.

Newsprint Output Rises 5%

MONTREAL (Staff) — With both production and shipments of Canadian newsprint during the month of August 5% higher than in August last year, U.S. consumer stocks and Canadian mill stocks at month end both registered improvements over levels prevailing a year ago.

Canadian production during the month at 570,377 tons was 5.7% higher than in August, 1955 while total shipments at 559,317 tons were up 4.6% over shipments of 534,621 tons in the corresponding period last year.

Total production for the eight months to date at 4,298,994 tons is up 5.2%. Total shipments at 4,245,816 tons registered a 3.9% increase, to 4,088,309.

Shipments to the U. S. at 461,661 tons were up 5.5% over 437,776 tons shipped in August last year. Total shipments to the U. S. for the first eight months are up 3.9%.

Total consumption for the first eight months reached 4,454,800 tons, up 3.8% over 4,289,720 tons consumed in the corresponding period of 1955.

U. S. consumers' stocks improved during the month and at Aug. 31 stood at 931,572 tons, 103,000 tons as at Aug. 31, 1955.

Also improved were Canadian mill stocks which at the month-end were 133,258 tons, up 7.8% over 123,585 tons a year earlier.

Stocks in the hands of U. S. publishers at the end of August were estimated at 46 days' supply as against 38 days' supply a year earlier.

CANADA MALTING CO. has cancelled 300 4½% cumulative redeemable preferred shares which it purchased. Now 197,372 preferred shares outstanding.

Note

by Vincent Egan

Investors are looking for a bonus feature with their securities, if recent new financing is any criterion. Latest major issue, expected shortly, is a $10 million offering of **George Weston Ltd.** debentures, carrying warrants entitling the purchaser to buy Class A shares at an advantageous price.

* * *

Canada Cement Co. financing is expected shortly. Some rumors say it may be prefered stock convertible into common shares. **Loblaw Groceterias** new $12 million debenture issue contained a conversion feature as well.

* * *

A smaller issue, that of **Canadian Drawn Steel Co.** 6% preferred shares, $10 par, has the infrequently seen participating right, enabling preferred shareholders to get the same slice of the profits as common shareholders.

* * *

Other new issues expected soon, with or without gimmicks, include a City of Ottawa $8,221,000 1-20-year debenture offering, a $15-million **Shawinigan Water & Power Co.** 4¾% bond issue, and the long-awaited **Trans-Canada Pipe Lines** offering.

* * *

Call loans of member brokerage firms of the Toronto Stock Exchange dipped by 2.6% during August; this was the first month-to-month reduction in five months, the largest in a year. Investors must now pay 6¼% on margin loans from brokers (vs. 5¼% a month ago), and some have decided to cash savings bonds rather than pay the new high rate. Most, however, seem content to pay the higher rate with the customary grumbling.

* * *

In the U. S., a similar slight decline in brokers' and dealers' loans is reported. But it isn't clear whether the basic cause is the investors' misgivings about the high cost of borrowing, or the fact that the banks haven't enough money in the till to meet the requests of all the would-be borrowers.

* * *

Brazil's dollar reserves are showing a healthy expansion, and her trade balance in first-half 1956 was favorable. The improvement is good news to investors in **Brazilian Traction,** widely held in Canada. In the recent past, Brazil's serious exchange difficulties have hampered the remission of earnings and dividends to Canadian owners of the giant utility.

* * *

Full-scale development of the Ungava Bay iron ore deposits in Northern Quebec may be nearer than you think. An international financial group led by Cyrus S. Eaton hopes to establish port facilities at ice-free Rype Island, off Greenland.

* * *

Ships would shuttle ore from Ungava to Rype during the four months when Hudson Strait is open, and from Rype to steel plants in Europe and the U. S. during the other eight months. The Eaton group is awaiting Danish Government's approval of its plan to build the trans-shipment base, which would be run by the group's two Canadian companies — **International Iron Ore Ltd.** and **Atlantic Iron Ore Ltd.**

* * *

Canada needs to boost its output of nickel by 21 million lbs. a year to beat the world's shortage and keep pace with increasing demand. By 1980, world consumption could well be one billion lbs. annually, thinks H. J. Fraser, vice-president and general manager of **Falconbridge Nickel Mines.**

* * *

By 1980, recoverable reserves of gas which will have been discovered in Alberta will total 88 trillion cu. ft., or one-quarter of today's proved recoverable reserves in the U. S., predicts A. G. Bailey. He's vice-president of **Bailey Selburn Oil & Gas,** and chairman of the Gas Policy Committee of the Canadian Petroleum Association. Gas is being found in Alberta at the rate of more than two trillion cu. ft. a year, or 10 times **Trans-Canada Pipe Lines'** requirement, he said.

* * *

Money is tight and interest rates high in the U. S. too, but more Canadian municipalities are looking across the border for needed financing. Fort William, unable to find buyers for a $1.4 million 4%-5% debenture issue in Canada, hopes to borrow in the U. S. Canadian municipal borrowers frequently can't afford to pay the interest rates being asked in Canada since the latest long-term Government issue was offered at a 3.76% yield to maturity in 1998.

* * *

Holders of **American Telephone & Telegraph** — possibly the world's most widely-held stock—are gobbling up a bargain offer. For each 10 shares they own, they are entitled to buy one new share at $100. Stock of AT&T was selling at about $185 when the new $575 million common stock offering was announced, opened this week around $173.

* * *

Despite the misgivings of some industry leaders, the premium race continues among grocery chains. **Canada Safeway Ltd.,** a 156-store chain, will introduce trading stamps in four western Ontario stores this week to "meet competition."

* * *

The public financing of **Trans Canada Pipe Lines Ltd.,** when it comes, will be one of the largest undertakings in U. S. or Canadian investment history—and possibly the most complex.

The number of investment houses of both countries which will participate in the financing may well set a record. Heading the syndicate will be **Lehman Bros.** in the U. S., and **Wood, Gundy & Co.** Some of the securities may be sold privately to Canadian and U. S. investors, while the public will probably be offered "units" consisting of debt and stock.

There has been no official announcement of the size or nature of the financing. One report suggests that some $175-$180 million will be debt, $35-$40 million preferred, $35-$45 million common.

Dividend Changes

COMMAND OILS LTD. — Common, 8c payable Sept. 28 to holders of record Sept. 19, ex-dividend Sept. 17. Total paid, in 1956 to date, 8c; in 1955 to same date, 15c; total paid in 1955, 15c. Recent price: $1.07.

KELVINATOR OF CANADA LTD. — Common, 15c payable Sept. 28 to holders of record Sept. 18, ex-dividend Sept. 14. Total paid, in 1956 to date, 65c; in 1955 to same date, 87½c; total paid in 1955, $1.12½. Previously paid quarterly, at annual rate of $1, established with 25c paid June 20/55. Recent price: $11.

HENDERSHOT PAPER PRODUCTS LTD. — 6% pref., $2.80 on redesignated 5% pref. shares, 70c on new 6% pref. shares, both payable Oct. 1 to holders of record Sept. 14, ex-dividend Sept. 12. First following redesignation and initial, respectively. Recent price: $97. New common, 6¼c payable Oct. 15 to holders of record Sept. 28, ex-dividend Sept. 26. First following 4-for-1 stock split. Previously, paid quarterly at annual rate of $1 per share (25c per share quarterly). Recent price: $6½.

UNITED KENO HILL MINES LTD.—Common, 10c plus 5c payable Oct. 15 to holders of record Sept. 21, ex-dividend Sept. 19. Total paid, in 1956 to date, 40c plus 15c; in 1955 to same date, 30c; total paid in 1955, 40c. Recent price: $6.30.

LOWER ST. LAWRENCE POWER CO. — Common, 43c payable Oct. 1 to holders of record Sept. 20; ex-dividend Sept. 18. Total paid, in 1956 to date, 80c; in 1955 to same date, 60c; total paid in 1955, 60c plus 15c. Recent price: $20.

INGRAM & BELL, LTD. — 60c part. pref., 15c payable Oct. 30 to holders of record Oct. 15, ex-dividend Oct. 11. Initial dividend. Recent price: $11.

BRITISH COLUMBIA TELEPHONE CO. — 4¾% pref. 1956 series, $1.38 payable Oct. 15 to holders of record Sept. 28. Initial dividend.

COMMONWEALTH INT'L. CORP.—Common, 8c payable Oct. 15 to holders of record Sept. 28. Total paid, in 1956 to date, 31c; in 1955 to same date, 28c; total paid in 1955, 28c. Recent price: $8.22 bid, $9.03 asked.

THIRD CDN. GEN. INVESTMENT TRUST LTD. — Common, 10c payable Oct. 15 to holders of record Sept. 28, ex-dividend Sept. 26. Total paid, in 1956 to date, 24c; in 1955 to same date, 26c; total paid in 1955, 26c. Recent price: $6.

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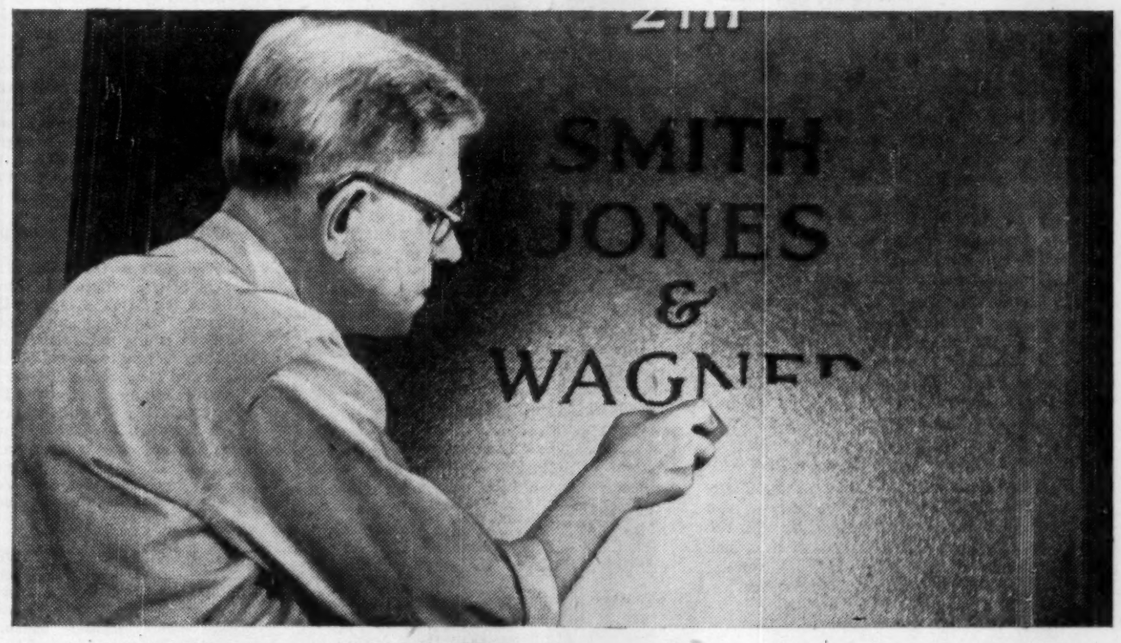

By law, a partnership is usually dissolved when one of the partners dies. The business itself, however, need not be liquidated immediately. It can be reorganized—and continue to thrive.

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FP-9-18

ANNOUNCEMENT

New President to Head Dow Chemical

N. R. CRAWFORD LEROY D. SMITHERS

At its annual organization meeting held recently, the Board of Directors of Dow Chemical of Canada, Limited elected LeRoy D. Smithers President and Chief Executive Officer, to replace N. R. Crawford who was elected to the newly created office of Chairman.

Mr. Smithers has been Executive Vice-President and a Director of the Company for several years. He has been associated with Dow for twenty years, the last ten with the Sarnia operations.

Weston Net Profits Rise New Financing Expected

George Weston Ltd.'s interest this year in the earnings of all its holdings, wholly and partly owned, is expected to equal $2.67 per class A and B share now outstanding, President George C. Metcalf revealed this week.

In an interim financial report to shareholders, he disclosed that on the basis of current rate of earnings for Weston-controlled companies, the earnings on which the class A and class B shares have a call are conservatively estimated at $7,325,000 after taxes.

This exceeds the $7 million estimate contained in his letter to shareholders dated May 15 this year (FP, May 19).

The figures include the interest of George Weston Ltd. in the consolidated net profit of **Loblaw Companies Ltd.** and through it, in in the profits of **Loblaw Inc.,** Buffalo, N. Y., and **National Tea Co.,** Chicago.

Weston's is arranging for additional financing, shareholders were told. Street reports suggest that this will take the form of a $10 million debenture issue which will carry warrants to purchase Weston class A shares.

Seven months' earnings of Weston's this year amounted to $2,018,011 after income taxes, compared with $3,311,935 for the full year 1955. Based on the experience of previous years, the operations and earnings of the combined group of Weston consolidated companies for the last five months usually match those of the first seven months, the company states.

This would suggest total earnings for the group of Weston companies included in the normal consolidation, of about $4 million —an increase of about $700,000 over last year's level.

The new financing will be used for the company's continuing program of expansion and development, and to further broaden the base of its operations and potential earnings, company states.

Our Oil Needed More

Whatever ultimately happens over Suez, it's certain that some form of long-range economic action will be taken by the NATO countries to reduce the dependence of Western Europe on supplies of oil from the Middle East. That means an even more intense interest in the oil fields of North and South America.

Total demand for energy fuels in Western Europe has risen from 640 million metric tons (coal equivalent) in 1937 to 735 million in 1954. It's still rising. Unless it is free to continue its rise, the economic momentum that is bringing prosperity to Europe will be lost.

Most of the increase in energy fuels consumed in Western Europe has been in the form of oil. Solid fuel consumption accounted for 87% of energy fuels used in the area in 1937; in 1954, the proportion of solid fuels was only 72%. That trend, too, is continuing. Almost all additional fuel must come from outside Western Europe. Net imports into the area (in metric tons, coal equivalent) were 44 million in 1937 and 134 million in 1954. Most of the increase was oil from the Middle East.

Two problems now face Europe. One is the development of additional ways of transporting oil from the Arab oil fields to the West: pipelines, alternative canals, or other devices. This is no solution to the current crisis, of course, but it's necessary to break the Suez bottleneck.

In addition, Western Europe must develop alternative sources of petroleum fuels. The Western European economy, these days, is something like an inverted pyramid resting on supplies of oil held in the hand of Arab leaders. Even if the delivery problem were solved, this would remain an uncomfortable situation which western governments could not allow to continue.

This is where Canada comes in. Even after the dust of the Suez fight settles, the notion of assuring additional oil supplies from within NATO is going to look pretty good. The problem of finding dollars to buy oil from Canada may seem less acute than the problem of finding ways, short of war, to discourage trigger-happy politicians from interfering with vital supplies.

Special Session Won't Help

Prime Minister St. Laurent is under some pressure to call Parliament together in October, in order to get the main part of the country's business out of the way before election-time next year.

It would be foolish, however, to suppose that merely starting the session early will ensure that business will be done sooner.

During the last marathon session, the Canadian House of Commons sat from Jan. 10 to Aug. 14, a total of 152 sitting days. Members filled 7,600 pages of Hansard with talk. This works out to about four million words, many totally irrelevant to the business at hand. If all the proceedings of all the committees were added, this total would be at least doubled.

No one really supposes that all those words and hours were necessary to the conduct of the public business. If members of all parties had exercised some common sense, the session could have accomplished its business in a fraction of the time. No party is free of blame in this regard, though some individual MPs may be.

If the session is begun early, there is every danger that a parliamentary corollary of Parkinson's law will apply. Parkinson's law is the one which states that civil service activity varies directly not with the amount of work to be done, but with the amount of time and help available; so that fruitless activity expands to fill any vacuum created by surplus supplies of time and labor. The parliamentary corollary may be that the verbosity of MPs varies directly with the number of sitting days available: If this is true, starting the session in October would accomplish nothing.

Whenever the session starts, both party officials and individual MPs should take stock of their efforts during the last session, and try to economize their own time. In particular, the government should try to work out a reasonable time-table for major legislation.

This has all been tried before; each session starts with protestations of good intentions on all sides. In the coming fourth session of the 22nd Parliament MPs had better make good on some of these resolutions. Otherwise, we hope voters who are weary of words will begin editing Hansard by the very effective method of eliminating the wordier MPs.

They're Building Canada

In the unsung hero class are the provincial and municipal officials whose job is to get more industry for their areas. Though they work only for their own provinces or areas, in combination they are doing a big job of industrial development for Canada.

As a recent Post article (FP, Sept. 1) points out, they're something a lot more than promoters and gladhanders. Research and development work are key parts of their task.

Because these men get little public recognition it's good to see the Provincial Governments Trade and Industry Council beginning an annual award for the most significant contribution to Canadian industrial development.

The first winner is Col. F. J. Lyle, OBE, consultant to the Ontario planning and development minister. Lyle's initiative in getting industry and keeping it happy is reflected in Ontario's booming business growth—which, in turn, benefits all Canada. Lyle also played an important part in setting up the Trade and Industry Council itself, with its aim of inter-government co-operation for economic growth.

There's another desirable aspect. Canadians are inclined to be niggardly in their praise of a job well done, reluctant to pat good men on the back. This new award is recognition of the sound principle that dollars are not reward enough for special ability and special service.

Hope for Wright Brothers

From the girdle to the jet engine, almost everything of value in the modern world was invented by Russians—if you believe the claims Moscow has been making.

But a change is in process.

Now a prominent Moscow journal says that a Russian really didn't invent the airplane in 1882. In fact, it admits on the day that a Mr. Mozhaisky was supposed to have flown the first plane, a storm was raging which no experimental craft could have survived.

It's a good sign that Soviet Communists may be rising a little above the My-old-man-is-smarter-than-yours attitude.

Bills Getting Higher

A main topic in the news this fall and winter will be that old standby, the cost of living. After a couple of years of steadiness, the general consumer price index is climbing.

According to the index, it now costs you $1.18½ to buy goods and services you could get for $1.00 in 1949. This is the third consecutive increase in the index, and the higher cost of steel hasn't yet been much reflected in consumer prices. It's obvious the index won't stop where it is now. The climb will continue for a while at least.

Back in May, the consumer price index was at 116.6. It had stayed at or near that level since the middle of 1954. Theoretically, then, if you got a $10 increase in income after taxes during that period, you could expect to be able to jack up your standard of living. Your gain in income wasn't wiped out by price rises. Now, with the index rising, it could be.

A sharp rise in the consumer price index is bound to have repercussions, both economic and political. There will likely be increased pressure for aid to old-age pensioners and others with fixed incomes. There'll be pressure for wage and salary increases to try to keep ahead of living costs.

In short, we are again on the old familiar inflationary treadmill, running hard just to stay in the same place. Anti-inflation measures in Ottawa and Washington may keep the rise from getting out of hand. But for some months, anyway, we are likely to find our month-end bills getting higher.

Chewing Tobacco Trouble

Canadian production of chewing tobacco in 1955 was down from the previous year, continuing a ten-year decline which cut chewing tobacco output from 2.8 million pounds in 1945 to 1.3 million in 1955.

There is no room now for the spitoon in the hotel lobby. A diplomat who today carried a portable spitoon (as the American Ambassador to Russia did during World War I) would probably be drummed out of the corps. The stage device of having a character chew tobacco to establish the fact that he's a comic old coot has vanished.

At its present rate of decline, the chewing tobacco industry will disappear within a generation. Even baseball-players—once the most dedicated chewers—are losing enthusiasm. In the interest of preserving this fragment of our uninhibited past, someone had better put a plug of tobacco into the next corner-stone that is being laid.

Beating the Labor Shortage

We met a happy man the other day.

He was 65, and he had just retired from his job as sales and service supervisor of a western Canadian firm. He was heading for a six-month, leisurely tour of Europe.

"I can afford the trip," he told us, "because I'm not going out to pasture when I get home. My company has re-hired me in a different job. There's less responsibility, less pressure — but it's a job where my experience is useful. I don't get the salary that went with my old job — but the salary I do get, plus my pension, means I don't have to take any cut in living standards. My wife and I can still afford to do the things we like to do — but with more time to enjoy them."

We called the company, and found its president equally pleased with the arrangement. "We've reorganized the department," he said, "and Joe takes great pleasure in the fact that it takes four new men to do his old job. Actually, the jobs are different, and Joe will not be connected with them in any way, so he won't be breathing down the new fellows' necks. Joe's job is one that requires a man who knows a lot about how the company's various divisions operate — and I don't know how we'd have filled it if Joe hadn't been willing to take it on."

Re-hiring retiring employees is one way of beating both the shortage of skilled help and the problem of inflation-cut pensions. Where it applies, it's a good solution for both management and employees.

"Why Don't You Make . . ."

Another popular dream goes up in smoke.

Several big American manufacturing companies now admit that the eager beaver who is always proffering ideas and plans for this and that is far more of a hindrance than a help.

Very, very few of these unsolicited suggestions have really worked out, it is said. Most of them, like the plan to incorporate a furcoat storage compartment in the family refrigerator, are wildly impracticable. Most of the rest have already been thought up and put to use by the professional.

It is those that fall in the second category that cause the most trouble.

Quite often when a person sees something new come on the market that he imagines he was the first to suggest, he goes straight to his lawyer and urges a big suit for damages. In a few cases an innocent company has paid rather than face publicity even though the new gadget was born in their own designing department.

As a result of this constant threat some companies have developed elaborate and expensive techniques for protecting themselves against such possible damage claims. Mail clerks get special instructions. Some companies announce a dollar limit on any unsolicited idea, though if they really use one and it proves valuable, they will likely make a generous and voluntary settlement. Some try to obtain signed releases saying the idea was submitted voluntarily. But even with these and other safeguards there is always a risk. If it weren't for the bad effect on public relations, say many of the big companies, we would toss all these unsolicited ideas right into the wastepaper basket.

Napier Moore's Scratch Pad

I HAVE SOME KNOWLEDGE of rose shows and the amount of toil and anxiety expended by growers who exhibit their blooms; the worry over last-minute heat waves or sudden chills. I know of the tender care lavished on iris and gladiolus by specialists, and I have looked upon the beaming countenance of a man who has taken a prize with a marrow as big as a balloon. But until I was recently in Northumberland, never had I heard of a Leek Show.

In matters of solicitous nursing, pride of achievement, magnitude of prizes and local excitement there appears to be nothing to equal the Leek Shows of Northumberland and Durham.

They are organized by social clubs and pubs. Hundreds of people who have small gardens and allotments pay as much as a pound entrance fee. They travel many miles to show their leeks.

Judging is based on the circumference of the stalk (they come as big as eight inches), the length of the "white" and the shape of the flags (leaves).

So keen is competition and so valuable the prizes (ranging up to a suite of furniture) that the day before a show club secretaries visit the growers and put special marks on the still rooted leeks they intend to enter; this to prevent substitution, for the entries must be home-grown.

It is by no means uncommon for growers to sit up all night, guarding their beloved leeks against snitching by less likely winners.

The man or woman who produces a prize-winning leek is a power in the community.

• • •

ANOTHER SURPRISE. That ancient saying, "It's like carrying coals to Newcastle," has lost its point. The centre of the North's colliery area is importing coal from America, paying more for it than it gets from the sale of Northumberland steam coal to the Continent.

• • •

WE HAVE just been commemorating Battle of Britain Day, and over London a fly-past of aircraft, led by a Hurricane and a Spitfire, each year pays tribute to the few to whom so many owed so much. (This year, bad weather canceled the scheduled fly-past.)

Commemorative exercises also take place at various RAF stations, in which the public participates.

In recent years a U.S. Air Force Squadron has joined in. A lot of people take a dim view of this. They feel that as the Battle was fought when Britain stood alone against the might of Hitler and the U. S. wasn't yet in the war, actual participation in the commemoration should be purely British or Commonwealth.

But that's nothing to the storm that arose over a suggestion that a German flyer, an ex-Luftwaffe fighter ace at present in England training in Hunter jets, should be in the fly-past. There was a howl of indignant protest and the idea was dropped.

• • •

SPEAKING of war aces, news of the death of Canada's "Billy" Bishop came as a grievous shock to the many in Britain who remember his amazing record in World War I, and to those who were associated with him in World War II.

I have memories of an evening in wartime London in 1942 when I was invited to attend a dinner given in Bishop's honor by the top brass of the RAF. I have never seen a guest list bearing more famous names, and the welcome given to the Canadian V.C. was stupendous.

• • •

THE MOMENT'S weirdest phenomenon in England is the Rock 'n' Roll craze imported from the U. S. In movie houses where the film "Rock Around the Clock" has been showing, imbecile teen-agers have gone berserk, smashing seats, attacking theatre employees and policemen, and rioting in the streets. It took 100 police to break up a riot at the Elephant and Castle. As a result, several cities have banned the film and in other places it has been withdrawn.

It isn't all spontaneous combustion. In one case the police received a riot call an hour before the riot took place.

• • •

At NEWCASTLE-ON-TYNE I recently went to visit a close friend of my boyhood and youth. Outside his house stood two stately, ornate lamp-posts. They are there because John W. Telford is the Sheriff of Newcastle.

They were erected on the day he was elected by his fellow aldermen, and, alas, will be removed on the day his term expires. All sheriffs have their names inscribed on the medallions of the gold chain they wear. When Sheriff Telford has his chain on, the link nearest his shoulder bears the name of his father.

Stop Me If . . .

A youth and his girl friend were out driving one summer evening. They came to a quiet spot on a country lane and the car suddenly stopped.

"Out of gas," said the boy.

The girl nonchalantly opened her purse and pulled out a flask.

"Swell!" exclaimed the boy. "Scotch or rye?"

"Gas," replied the girl.

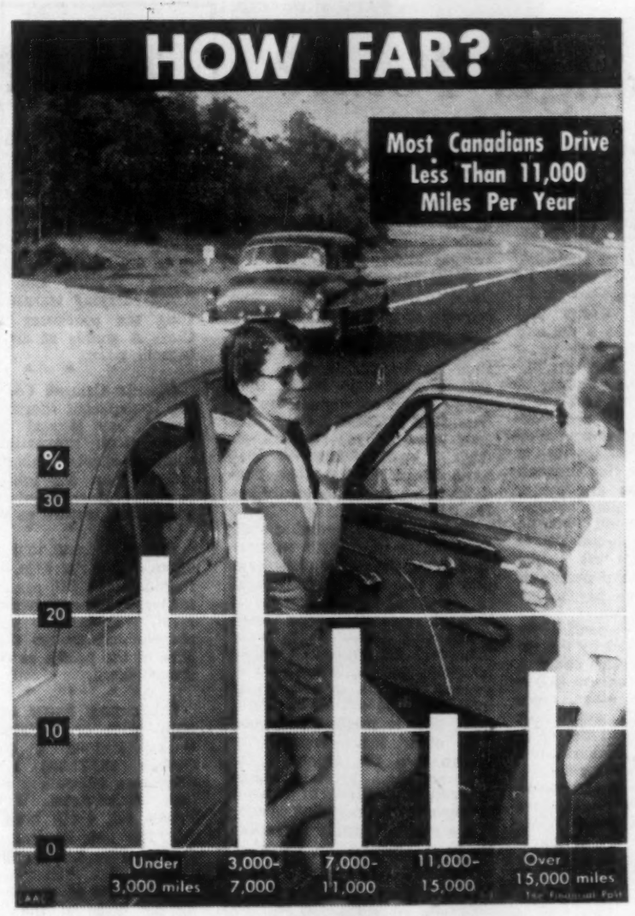
• • •

Two small boys approached a woman who was visiting a farm for the first time.

"If you will give us a quarter, my young brother will imitate a chicken for you," the taller boy said.

"What will he do," the woman asked, "crow like a rooster?"

"No," the boy replied, "none of those corny imitations you see on television — he'll eat a worm."



Post Scripts

Dow's New President

LeRoy D. Smithers, new president of Dow Chemical of Canada, has been a big factor in that company's amazing growth record in this country. Now 48, with all the drive of a 20-year-old, Smithers came to Sarnia in 1946 to help set up Dow's first manufacturing operation on the banks of the St. Clair River. His has been a major guiding hand in the 12-plant expansion program since that time.

Boyish-looking, fast-talking Smithers has no doubts about the direction of the Canadian chemical industry from here — particularly the dynamic petrochemical branch. His shrewd market appraisals and extensive chemical engineering knowledge are pretty good assurance that Dow will stay well in the forefront of the expansion race, where former President N. R. Crawford had consistently kept it. Mr. Crawford now becomes chairman of the board.

Behind his boyish enthusiasm and easy manner is a fast-moving and keenly appraising mind. On his shoulders now will largely rest the major decisions on the future course of Dow's Canadian operations. A number of new petrochemical developments are inevitable in this country over the next few years and Smithers has as good an idea as anyone just what they'll be. As he fully appreciates, one of the big problems in any new expansion moves is one of timing.

The new president attended public school in St. Joseph, Mo. and then the University of Missouri at Columbia. Upon graduating in 1931 with a B.Sc. degree in Mechanical Engineering he worked in St. Joseph and coal fields of Oklahoma. He joined Dow in 1936 in a subsidiary — Dowell Inc. — specializing in the chemical servicing of oil and gas wells. He later served with Dow Texas Division at Freeport, and the Styrene plants both at Midland, Mich., and Los Angeles, Cal.

Early in 1946 he came to Sarnia, as works manager of the Sarnia operation. He became executive vice-president of the company in 1950, and was elected president on Sept. 13, 1956.

Smithers is very active in civic affairs in Sarnia. He is a member of the Advisory Board of St. Joseph's Hospital, a past president of the Sarnia Rotary Club, past chairman and director of the Sarnia Community Chest.

Despite all his company and community duties he manages time to be a keen family man; to work on stamp collections with his 18-year-old son Bob; help his wife and 10-year-old daughter, Claudia, to keep in trim their five-acre property in Corunna on the banks of the St. Clair River.

• • •

New Prairie Region Boss

Whatever breaks may have come to George Everett Mayne in his rise from a junior position with the Canadian Pacific Railway in a small Ontario town to vice-president of its prairie region were largely of his own initiative.

MR. MAYNE

Born on a farm in 1901 at Actinolite a hamlet 50 miles or so east of Peterborough, he started work immediately after leaving high school. His first job was with the CPR as assistant to the agent at Sulphide not far from his home. That was in 1918 when he was 17 and he has been railroading with the CPR ever since.

Like many officials of the company he worked his way up from the telegraph division. He was a young man in the decade of the great depression working at Ontario points sometimes as agent and latterly as dispatcher. His first major appointment in the company's operating field came toward close of the Second World War when in 1944 he was made assistant to the superintendent of the Bruce division with headquarters in Toronto. Successively he became assistant superintendent at Sudbury, North Bay, Schreiber, and finally of the Montreal Terminals Division. While there he was responsible for supervision of the construction of the company's modern St Luc hump retarder assembly yard in Montreal.

His first transfer to the west came in 1951 as general superintendent of the Alberta district at Calgary and then after a brief period in Toronto he became general manager of the prairie region with headquarters in Winnipeg which he left a few weeks ago to take over his present post.

From the standpoint of long haul transportation the prairie region with approximately 9,500 miles of trackage is the plum of the CPR system. For at least six months every year while the big bulk of the grain crop is moving its directing head hasn't much spare time.

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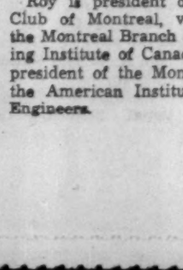
Heads Quebec Engineers

At one time it must have appeared rather doubtful whether the new president of the Corporation of Professional Engineers of Quebec would ever become an engineer. Leo Roy, born in 1907, was one of a family of 12. For awhile there were nine of his brothers and sisters at college, university or convent. That put rather a financial load on the father and young Leo had to earn his own tuition.

He won a scholarship to attend the last years of Mont-Saint-Louis College from where he received his second scholarship to attend the Ecole Polytechnique in 1926. During the summer periods and holidays, he worked at the City and District Savings Bank for two years, and for the Quebec Bureau of Mines on geological surveys.



MR. ROY

Upon graduation as a civil engineer in 1930, Roy joined the apprenticeship course of the Shawinigan Water & Power Co. where he gathered experience on meters, transmission lines, substation and powerhouse operation and maintenance.

He also took a correspondence course from the University of Wisconsin on advanced electricity. The next year he entered McGill and in 1932 received his B. Eng. — Electrical degree.

Roy returned to the Shawinigan Water & Power Co. at Shawinigan Falls Power-House. He also took a course in German and ski lessons from a German-Swiss engineer. He had a minor accident and was transferred to Montreal. There he joined the Junior Chambre de Commerce and participated in its public speaking course. Three years later, he was sent to Quebec City to organize for the Quebec Power Co. its power sales department.

He joined the Quebec Hydro-Electric Commission in 1946 and since 1952 has been chief engineer of its auxilliary services.

Roy is president of the Electrical Club of Montreal, vice-president of the Montreal Branch of the Engineering Institute of Canada and a former president of the Montreal Section of the American Institute of Electrical Engineers.

What Others Are Saying

Editorial of the Week

Better Balance Required

Toronto Globe and Mail

President F. G. Ferrabee of the Machinery and Equipment Manufacturers Association recently held that certain Canadian tariff items tend to favor the relatively faster expansion of raw material production instead of the growth of those industries which provide the machinery and equipment necessary for use in such production.

As a result, considerable quantities of equipment used for primary production are being imported free or at low rates of duty, while the importation of plant facilities for the production of such equipment in Canada is inhibited by what Mr. Ferrabee refers to as "adverse 'class or kind' rulings" by our customs authorities. The latter are governed by tariff schedules which were drawn up before domestic industry had developed an interest in the manufacture of logging, mining, oil production and other types of machinery used by extractive industries.

Mr. Ferrabee summarized the position of industries in the association as follows:

> It is a fact that very little machinery or equipment can be completely of Canadian origin. Accessories, components and special materials, to say nothing of plant equipment, are not always available from Canadian sources. Would it not be reasonable to allow free entry of such items to the Canadian manufacturer of machines and equipment which must compete with complete units and parts thereof, which come into the country duty free, or for the production of plant equipment to produce items for specific end uses?

A Government interested in balanced economic growth and in diversifying job opportunities in industry should be able to see the cogency of such an argument; following which, it should prepare to revise existing tariff schedules accordingly.

Other People's Views

U. S. SIGNS seem to tell, comments **The Ottawa Journal**, that Eisenhower is not going to have the "shoo-in" so many thought probable; that his health is increasingly an issue which could tip the scales for Stevenson.

WHAT PRICE PROGRESS, wonders **The Niagara Falls Review**. Pioneer women braved the wide Atlantic and the wilds of the new world wrapped up in shawls. Then came the time when only the poorest of European immigrants wore the shawl, and they just off the boat. Now shawls are back in style in the swankiest of places masquerading under the name of "stole."

STRICT highway traffic laws and stern penalties may be, in themselves, useful deterrents to recklessness on the open road, concedes **The Saint John Telegraph-Journal**. But an increasing number of states in the United States are coming back to the old precept that nothing prevents neighborhood crime like a uniformed policeman standing in plain sight on the corner.

OFFICIAL OPINION in Ottawa and Washington, notes **The Winnipeg Tribune**, appears to be that the new American wheat export subsidy program is unlikely to have much effect on Canadian wheat sales abroad — that it is merely a change in method. One thing is certain, though. If the new program doesn't affect international sales it will not be for lack of intent. The avowed purpose is to reduce the volume of wheat going into U. S. surplus stocks and increase the flow from them.

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September 28, 1956

McGEACHY LOOKS AT LONDON

Britain: Fretful 'Middle Man'

By J. B. McGEACHY

LONDON—After a week of talking to all sorts of Britons, here is my topmost impression: They are by no means neutral in the cold war. They dislike Communism as heartily as their transAtlantic allies. But the important point is this: They are thoroughly bored with the quarrel, wish to high heaven it could be composed and believe that good will and imaginative statesmanship could indeed compose it.

The British are not merely tired of the Russo-American argument. They feel frustrated by it. They have a sense of being inhibited, of not being able to make up their minds and policies independently as they used to, because they have to keep one eye constantly on the Americans and the other as constantly on Moscow.

J. B. McGeachy

The numbing effect of this posture "in the middle" has been clear throughout the great debate on the Suez Canal question.

It seems altogether likely that, but for the necessity of taking American and Russian reactions into account, Sir Anthony Eden would have (so far as he could) used force against the Nasser regime immediately after the canal was nationalized. In Fleet Street it is firmly believed, without overt evidence, that there is a rift in the Cabinet on this issue. Sir Anthony and his chancellor of the exchequer, Harold Macmillan, are said to have favored military action. Two other powerful ministers, R. A. Butler and Walter Monckton, are described as the leaders of the anti-force faction.

A remarkable feature of the situation, perhaps not widely publicized abroad, is that Britain was not ready to act decisively in Egypt when Nasser seized the canal.

Despite gigantic expenditure on defense, despite the existence of the Mediterranean fleet and the Cyprus base, it was not until nearly a week after Nasser's bold stroke that British forces in adequate strength were assembled and poised for action.

By that time, since there had been no further provocative action by the Egyptian strong man and traffic was flowing freely through the Suez, the case for the use of force had been greatly weakened.

• • •

Today, so far as I can discover by conversation with politicians, journalists and members of the public, the prevailing opinion in London is that British military action in Egypt (except with the consent of UN and after condemnation of Nasser as an aggressor by that body) would affront world opinion, alienate the U. S., unite the Arab world against the West, and even be slightly absurd.

"Anthony might have got away with it in the first 48 hours," people tell you, "but not now."

The only dissenting voice, in conversations I've had, was that of a Tory MP. "I think we'll see a spot of action before this thing is settled," he said to me. This member, I have found in the past, often reflects the prime minister's opinions.

The shrewdest comment I heard was perhaps a diplomat's remark that "the two objectives—international control of the canal and the removal of Nasser—are quite separate operations which cannot be conducted as one or at the same time."

It is France, rather than Britain, that urgently wishes the fall of Nasser's regime. The French are more concerned about his political aims than about the canal itself; they regard Nasser as one Arab leader who might unite North Africa and the Arab world against the West.

This may be a just appraisal of Nasser's stature and popularity but good students of politics in this capital think the French position is unrealistic. Nasser, they say, is much less bellicose than some of the sabre-rattlers who might step into his place. An MP who recently visited Cairo and is celebrated as a friend of Israel, told me that though Nasser has stiffened and enlarged the Egyptian Army and officer corps, his military expenditure has been niggardly in the estimation of the army men who put him in power. They are irritated by what they consider his lavish spending on social and economic reform.

The same MP, having inspected both Egyptian and Israeli forces, assured me that the Israeli Army could be in effective control of the canal in 36 hours if given the command to march; but this estimate of the disparity is not universal among the well-informed. The Israelis, it should be noted, have a direct interest and a grievance that no other nation has; Israeli ships are still prevented from using the Suez, on the pretext that the Arab-Jewish war is still going on, as technically it is.

The outcome of the Suez debate, at the time of writing, is still uncertain. But it seems probable that the attitude of John Foster Dulles (suddenly the hero of the Labor Party) and the failure of the U. S. Government to offer Britain the support of the American Mediterranean fleet, the strongest fighting force in that sea, will effectively restrain Sir Anthony and his government from military intervention without UN's approval. There is, of course, not the slightest chance that UN would sanction the use of force by a valid Security Council vote, seeing that the Russians possess a veto in the council and will certainly not be caught napping, or sulking in their tents, as they were when the Korean question came up in 1950.

• • •

The Suez debate, during my days here, has almost monopolized cocktail party conversation, front-page headlines and parliament. The only competing subject has been the decision of the Trade Union Congress, powerful federation of the British labor unions, to abandon the policy of "wage restraint."

In effect the organized workers have decided that they will no longer co-operate with the Government in the battle against inflation by refraining from demands for higher pay. Unions all over the country have been given the green light to go ahead and ask for more. A rash of wage disputes is expected.

Of course the TUC is being scolded for carrying on the inflationary paper chase and for handicapping Britain's export drive by adding to costs. Serious labor spokesmen give two answers. The British pound, they say, is undervalued at $2.80 and as a consequence all imported goods are dearer than they should be in terms of sterling; wage increases are legitimate compensation for this penalty imposed on consumers. The validity of this argument could only be tested by making the pound convertible and discovering its value in a free market—a decision which still seems as remote as man's first journey to the moon.

The other argument is that British export trade is not being limited and hampered by high production costs but by exceptionally heavy domestic demand for goods of all kinds. There is no doubt about this demand. Evidence is plentiful wherever one turns, in the crowded shops, in restaurants and food prices, in the swarming of motor cars on city streets and country roads. Last Saturday it took me 50 minutes to drive the half-mile length of High Street in the Surrey town of Guildford, so dense was the traffic jam caused by a nearby air show.

• • •

To the casual view Britain is prospering as never before. Without any doubt the average rate of consumption is the highest in the island's history. But under the surface there are signs of serious malaise.

Britain, and especially the rank and file of workers, is nowadays obsessed with "dividing up" and with "fair shares," not sufficiently concerned with increasing production. The question is strictly a matter of incentive.

A London man of business put it this way: Where is the incentive for the manufacturer to develop markets abroad when his extra income may be subject to a 97.5% tax and when in any case, he can easily sell his existing output in the home market? (There are, it is true, exceptions to this rule, such as the motor car industry, but in general, it holds true.) And where is the incentive for the worker to produce more, to be mobile, or to hunt for a better job when there is already full employment at good pay?

The Conservatives have been no more successful than the Laborites in finding the answers. Several of my friends have remarked that between Tory Britain and Socialist Britain you cannot tell the difference.

• • •

Footnotes on Canada as observed by R. H. S. Crossman, MP on a recent visit to the CCF convention at Winnipeg and the Couchiching Conference.

On the mantelpiece in Crossman's home in Vincent Square there is a recently acquired soapstone sculpture of an Eskimo woman. "Very moving art," says Crossman. "On this side of the Atlantic it would be signed by Henry Moore or some other famous sculptor, but it's by an Eskimo. Must he or she be anonymous?"

Crossman met a Canadian whose business is making burnt sugar. "You can't earn a living that way," said Crossman.

"Oh, yes, I can," the man said, "in fact, I've made a great deal of money. My product makes the brownness in whisky and beer. Other people make money supplying yellowness or greenness or redness. You see, in Canada the color of food and drink is important. People judge food by its color because we take the flavor out of it, by pasteurizing and other processes so that no taste will be offended."

Britain: Wishful Fantasy

By J. B. McGEACHY

LONDON—If ever a stage play reflected the spirit and wishful thinking of a nation at a particular point of time, it is the fantasy of Peter Ustinov, the still youthful prodigy of the British theatre, entitled "Romanoff and Juliet."

It has been running here for about four months and still plays to full houses.

Skilful performances account partly for this success. But "Romanoff and Juliet" pleases the British audience by its politics as much as by its artistry.

The scene is the main public square in the picturesque capital of the smallest country in Europe. This imaginary principality is ruled by a benevolent despot who spends his days dispensing genial philosophy to his subjects high and low, and trying to make everybody happy.

On opposite sides of the square are the American and Soviet embassies. The plot hinges on the romantic attachment of the son in the Russian household and an undeviating Marxist, with the daughter in the American household who shares her father's preference for the economic and social mores of the good old U.S.A. Their falling in love produces alarm, despondency and wringing of hands in both families.

It is indeed a Romeo and Juliet situation, but there are no melodramatic deaths in the last scene. Instead there are wedding bells. The ambassadors shake hands and declare that they never felt happier. The joyful proceedings are wound up with a speech which touchingly says in effect: "This couldn't happen, of course, but every civilized person wishes that it would." At this point the audience responds with eager and even rapturous applause . . .

The Ustinov play exactly expresses the present temper of the British people.

Here's When You Watch TV, Listen Radio

In the winter, the average Canadian watches television more than he listens to the radio. In the summer, it's the other way around.

Television is largely evening relaxation; most radio-listening takes place during the daytime.

These are conclusions of **International Surveys Ltd.**, based on surveys in the Toronto, Montreal and Vancouver areas.

The surveys show that from April to October inclusive, the Canadian radio is switched on 2.16 to 3 hours daily, the TV set 1.4 to 2.2 (with radio usage predominating every month). However, from November to March, TV usage (2.48 to 3.14 hours) runs higher than radio usage (2.36 to 2.4).

According to the surveys last February, 85% of TV sets were in use between 8 and 9 p.m., compared with less than 10% of radio sets (August figures 56% and 9% respectively). Peak hour for radio listening in February was noon to 1 p.m. when 30% of sets were in use as compared with 6% of TV sets (August figures 22% and 5% respectively).

Savings & Investment Corp. To Offer New Mutual Shs.

MONTREAL (Staff) — A new fund has joined the ranks of Canada's mutual investment funds.

It is **Savings and Investment Corporation Mutual Fund of Canada Ltd.**, with head office in Quebec City. Company's authorized capital consists of $10 million $5 par special shares and 1,000 common shares $1 par.

The new fund was formed by **Savings and Investment Corp.**, an organization established in 1928, which sells savings certificates in Ontario, Quebec and the four Atlantic provinces. The newly established mutual fund will be administered by Savings and Investment Corp., which will receive a fee for its service.

Company reports that it is currently readying prospectuses on the fund and these will be submitted for clearance by the various provincial securities commissions in the near future. Barring unforeseen delay, shares of the new mutual fund should be offered to the public within the next month or two.

The new mutual fund plans to market the shares in the six provinces in which Savings and Investment Corp. currently does business. Scope of the operation may be extended to a full national basis at some future time.

Savings Certificates

Savings and Investment Corp. says it has approximately $85 million savings certificates in force. Unlike a mutual fund, the savings certificates plan operates through regular payments to the company by the certificate holder over a fixed period of time. At the maturity date of the certificate, the holder receives the face value of the certificate, which includes accrued interest.

Savings and Investment Corp. decided to enter the mutual fund field largely because the operation of the savings certificate plan and the mutual fund complemented each other, officials reported. Other savings certificates firms with similar set-up include Investors Syndicate and Champion Savings Corp.

Prior to the establishment of the mutual fund, a company official said, Savings and Investment Corp. had a plan to offer to people who wanted to build capital but had no plan for people who had capital they wished to invest.

Officers of the mutual fund have not yet been named. President of Savings and Investment Corp. is L. S. Martel. Vice-presidents are A. Noreau and B. E. Leclerc; Treasurer, J. P. Tardis; Secretary, H. P. Trouin. Other directors are Levis Tardis, P. Gingras, P. Cote and A. Verge.

Celanese Corp. Growth To Cost $100 Million

Growth prospects of **Canadian Chemical & Cellulose Co.** are excellent, said President Harold Blancke of the parent Celanese Corp. of America.

The mill at Prince Rupert, B.C., has been redesigned to allow production of paper pulps and dissolving pulps for rayon manufacture, he pointed out to the New York Society of Security Analysts this week. The Prince Rupert mill was originally a producer only of high alpha cellulose for processing into cellulose acetate.

Parent company plans to spend $100 million on capital expansion over the next five years, to expand and diversify sales, the president said. He predicted sales volume would reach $300 million by 1960, with most of the expansion taking place in company's chemical and plastics divisions.

Telephone Cable To Britain Opens Shortly

MONTREAL (Staff)—The $40 million transAtlantic submarine cable between Canada and the U. K. — under construction for the past two years — will be placed officially into service next week.

Inaugural ceremonies will start from Ottawa when Transport Minister Marler speaks with Rt. Hon. Dr. Charles Hill, postmaster general in London, England and Cleo F. Craig, president of the American Telephone & Telegraph Co. in New York.

The undersea cable development is a joint project of Canadian Overseas Telecommunication Corp., the British Post Office and AT&T.

Through the cable, Canada will be provided with six telephone circuits. This will permit transAtlantic telephone conversations free from "fade-out" which frequently plagues the present radio telephone system. The cable will also provide this country with additional telegraph channels improving telegraph service between Canada and the U. K. One special feature will be development of an overseas customer-to-customer teleprinter service through the U. K. and Europe early in November.

The standard telephone charge at present from Toronto to London is $12 for the first three minutes and $3 for each further minute. Rates at off-peak period are $9 and $3 respectively. Rates from Vancouver are $15 during the day and $12 at night.

The new charges are expected to be about one third cheaper.

Fall and the Future . . .

Whatever the weather nothing seems to end the summer season quite so finally as the return of children to school and the knowledge that for most, vacations have finished for another year.

Except for casual discussions of where to go next year, the relaxed routine of vacations is replaced with more serious thoughts. Savings are checked and consideration is given as to how they should be used.

Putting your savings to work in sound securities is just good common sense. We don't suggest you'll make a fortune overnight, but it is surprising how quickly even a modest sum regularly invested in sound securities builds up to a sizeable amount.

Whatever the amount of your savings, our services are available to you without obligation. At Ames we think you'll find the kind of people you'll like to do business with . . . experienced people who can advise and help you make investment decisions most suitable to your personal requirements.

If you would like to discuss putting your savings to work, we will be glad to help you, and would like you to accept this as your invitation to come into any of our offices . . . either in person or by mail.

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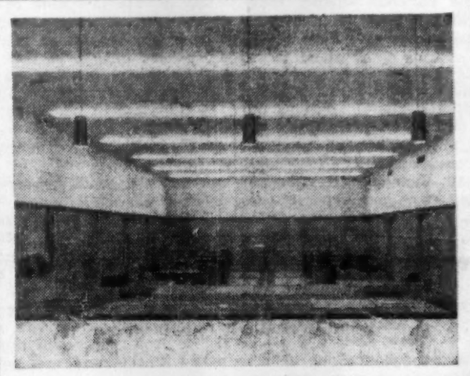

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IMPRESSIONS COUNT!

• A well-known western Ontario newspaper remodelled its business office to typify the successful position the newspaper enjoys in the community. Besides the confidence-instilling aspect of the streamlining, it affords a measurable improvement in office morale and efficiency.

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Do you buy advertising space on the basis of cold, hard, facts?

. . . if so, check these

- ONE daily newspaper will do your coverage job in English Montreal.
- That newspaper is The Montreal Star.
- The Star gives you coverage that would require two or more newspapers in most major cities — well over 90% of Montreal's English families.
- The Star supports your advertising with useful market information and practical merchandising services.
- The Star covers its market at the lowest milline rate of any paper in its field.

These are simple, but important reminders for any advertiser or space buyer who wants to get the most from media dollars in English Montreal.

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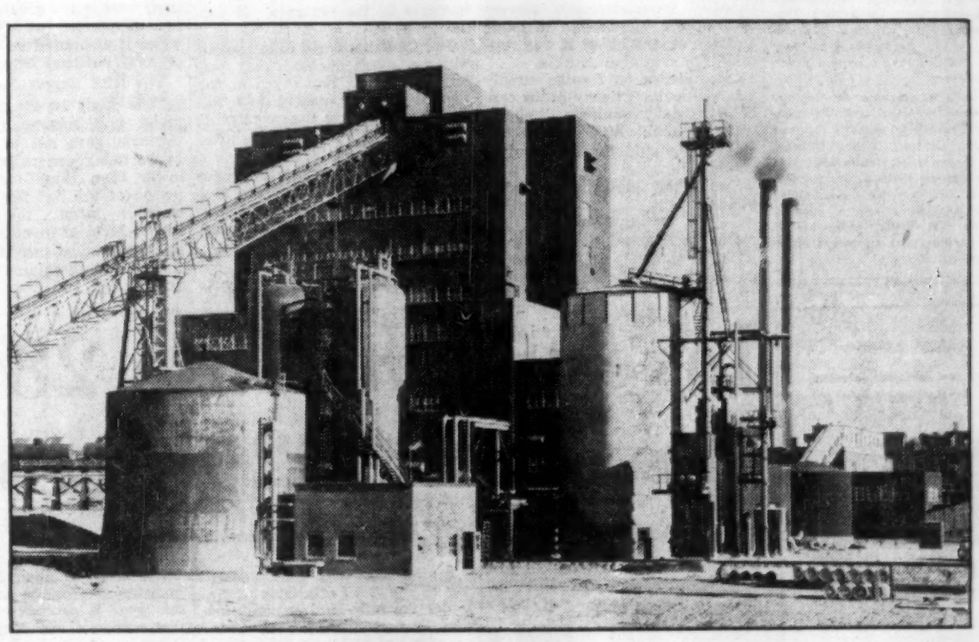

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The extensive experience of Stone & Webster in the pulp and paper industry includes the design and construction of the world's first chemi-groundwood plant for the Great Northern Paper Company and the construction of its recent expansion program at East Millinocket, Maine.

Stone & Webster is now engaged in the design and construction of a complete new insulationboard and hardboard mill at Alpena, Michigan, for Abitibi Corporation, a subsidiary of Abitibi Power and Paper Company Limited.

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HOW FARES THE ECONOMY?

Our Deficit Pace Not Slackening

By MICHAEL BARKWAY

OTTAWA (Staff)—The Financial Post's estimate of the Canadian deficit with the world at an annual rate of $1,500 million (Aug. 25) was right on the button. In the first half of the year, according to the official report of DBS, we spent abroad $771 million more than we earned—an annual rate of $1,542 million.

According to the seasonal pattern, as determined by the National Accounts section of DBS, this deficit in the first half of the year is equivalent to a rate of $1.2 billion for the full year.

But in this extraordinary year 1956, it doesn't yet appear that the deficit on our foreign transactions is likely to slacken as it should do according to proper seasonal patterns. Present indications are that the deficit on current trading, contrary to the usual seasonal trend, is likely to maintain something like the pace of the first six months for most of the rest of the year.

This is partially confirmed by the pattern of security trading in July, which brought in new capital at a rate in excess of the first six months—$27 million for the month, against an average of $20 million for the first half-year.

A wave of enthusiasm for Canadian stocks in the U. K., and to a lesser extent in other overseas countries, mainly accounts for the increased inflow (see separate story).

The effect of the current account deficit in the first half-year was to increase Canada's net debt to foreign countries to the highest level it has ever reached; and there is every indication that it is still increasing at a record rate.

At mid-year the net foreign debt of Canada amounted to $8½ billion, according to DBS. This is $800 million higher than the revised estimate of $7.7 billion for the end of 1955.

It is a very sharp increase since 1949 when our external liabilities exceeded our external assets by only $3.7 billion. In per capita terms it means that every Canadian now carries a load of about $530 in foreign debt, whereas in 1949 we carried only $276 per head.

Even at the middle of last year (assuming that last year's debt growth was fairly evenly distributed over the year) the per capita burden of foreign debt was only $460. It has increased 15% since then, and 9% since the beginning of this year.

Capital Inflow

The increase of foreign debt is, of course, inseparable from the high level of capital inflow which is supporting just over one fifth of our current use of goods and services. But until three years ago it had been kept below the level of 1930—which remained in people's minds as a sign of ill omen.

1930's debt amounted to $6.5 billion; and at the time it was considerably greater than the year's total Canadian output. 1930's gross national product came to only $5.5 billion. By contrast our 1956 foreign debt burden amounted to 29% of the current rate of Canadian output. In per capita terms, also, the 1956 debt burden is considerably lighter—though the difference is not nearly as great as it is if you consider it in terms of GNP.

Compared with this year's burden of $530 per head, the burden in 1930 was $637 per head.

It is also interesting to compare the very rapid 1956 increase in foreign debt with more recent years.

The last big year of capital inflow before 1955 was 1951. That was the first year that foreign issues of Canadian bonds had caught up to the 1930 level. In the full year 1951 Canada sold new issues abroad to the extent of $411 million, and retired $184 million, leaving net new bond issues of $227 million.

New Bond Issues

In the first six months of this year, we sold new bond issues of $278 million, and retired only $99 million—leaving net new issues of $179 million. So the pace of new borrowing in form of bonds was far ahead of 1951.

This year we have also received foreign capital for direct investment at a rate well ahead of any previous year; and our sales of outstanding Canadian securities have also hit a new record (FP, Sept. 8).

You can find previous years to compare with 1956 in each of these different forms of long-term inflow. But no year has approached the combination of all three which we have had this year.

Long-term inflow—in the form of new direct investment, new issues, trade in outstanding securities, and official loan repayments—covered 80% of the deficit so far this year. This is a contrast to last year when short-term movements covered more than 40% of the deficit.

Last year foreigners were building up their holdings of Canadian dollars to a peak of $435 million at the end of the year. This year they have reduced them by $27 million in the first half.

Other short-term movements are very difficult to identify in the confusion of an extremely active exchange market. They accounted for an inflow of $277 million in the first half of the year, which must have included the normal leads and lags of commercial trade, together with all the offsetting transactions in forward exchange. Undoubtedly more borrowing in the U. S. by installment finance companies was one of the factors.

The most interesting thing about the record rate of capital inflow for direct investment in non-resident-owned subsidiaries this year is the increasing participation by the U. K. and European countries.

Detailed figures for each country's share are not yet available. But last year the U. S. contributed about $306 million to a total inflow for direct investment of $410 million. This left about 25% of the total for all overseas countries.

U. K. Contribution

The U. K. contribution was estimated at $66 million, and that from other countries at $38 million.

This year, out of a total considerably higher, the U. S. share is believed to be down to 65%. This means about $162 million of new capital for direct investment coming from the U. S., and $88 million coming from overseas.

European countries have already contributed more than last year's $38 million, and the U. K. must have invested about two-thirds of last year's total in the first six months of this year.

This direct investment, coupled with the growth of equity holdings in existing Canadian stocks as a result of the splurge of U. K. and European buying this summer, means a sharp increase in the overseas stake in Canadian business — though the United States still keeps far ahead.

Canada's Boom

GROSS NATIONAL PRODUCT

(Omitting farm sector; by value, unadjusted for price.)

	$ millions
1956*	27,508
1955	25,365
1954	23,170
1953	22,821
1952	21,404
1951	18,602
1950	16,700

*First half at annual rate, seasonally adjusted.

IN CONSTANT DOLLARS

(GNP, including farm, in constant dollars, i.e.—volume, not price.)

	$ millions	% change from previous year
1956*	23,039	+6.7
1955	21,573	+8.7
1954	19,844	—2.4
1953	20,332	+3.8
1952	19,585	+6.8
1951	18,340	+5.9
1950	17,325	+6.3

*First half at annual rate, assuming second half matches increase of last year.

Our Output Soars 11%, But Can't Fill Demand

OTTAWA (Staff) — Canada's annual rate of gross national product in the first half of 1956 is estimated at about $29 billion — the average of the first quarter's $28,572 million and the second quarter's $29,548 million.

These seasonally adjusted figures include an allowance for the big 1956 crop, which is put at $150 million above 1955's. They mark an increase of about 11% over the first half of last year; but because of price increases the rise in volume of output is considerably smaller—not much over 6%.

Gross national product measures the value of all goods and services produced in Canada. The most striking thing about it this year is the wide margin by which Canadian output failed to meet Canadian demand. Besides our own output of $29 billion, we spent $7½ billion on imported goods and services.

In all Canada was using or stashing away goods and services worth, at an annual rate, $36½ billion. This is what's known as "total final demand" or "gross available supply." We've been using, or putting into inventories, $5.03 worth of goods and services for every $4 worth we produced.

Debt Rises

As a consequence our net indebtedness to other countries has risen to a new record (see separate story).

Compared with the first half of last year, our "total final demand"—the sum of all our purchases—is up by 13½%. Our own output of goods and services is up by less than that—just over 11%. But the goods and services we bought abroad have increased by nearly 23%.

To put it another way, Canada supplied from domestic sources 68% of the increase in demand, and the other 32% of it was supplied from foreign sources.

Dependence on foreign supply was particularly heavy in the case of industrial machinery. Imports covered about 40% of the increased demand for this kind of goods.

That's the supply side of the picture.

Demand Side

On the demand side, the most striking thing is the predominance of new business investment.

Business investment in new plant and equipment has been running at an annual rate of about $4.7 billion—a full third higher than last year. Increase in business inventories has also been at the rate of about $1.1 billion.

These forms of business investment taken together are nearly 49% higher than a year ago; and they account for no less than 44% of this year's increase in demand.

All the rest of the economy showed an increase in effective demand of less than 9% compared with last year. Here are some of the increases in other principal categories, comparing the second quarter of 1956 with the second quarter of 1955:

—Personal spending on Consumer items: plus 7.3%.
—Government spending: plus 6.9%.
—New housing construction: plus 12.2%.
—Exports (goods and services): plus 13.6%.

All these increases appear very small beside 36.6% for new non-residential construction, and 33% for new machinery and equipment.

Consumer Spending

Up to mid-year anyway, spending by consumers had not kept pace with the increase in personal incomes.

In the second quarter personal income came to $21.5 billion. This was 9.5% above the second quarter of 1955, and 4.6% above the first quarter of this year.

Taxes took $1.7 billion, leaving "disposable income" at just under $20 billion—8% up from last year.

To show how steeply the tax take rises as incomes increase, compare that 8% increase in personal income after taxes with the increase in the tax rate. It was up by 21%.

But Canadians still didn't spend all the extra income that was left to them. They saved at the annual rate of nearly $1.8 billion, which makes the respectable proportion of 9% of income after taxes.

This is a considerable improvement over the 7½% of the first quarter, and the average of only 7.2% for the whole of last year.

Labor Income

The rise in labor income between winter and spring this year was the chief factor in increasing personal incomes. On the year-to-year comparison, investment income and labor income are up by about the same proportion compared with mid-1955—11.5% for labor income, and 11.7% for investment income.

But the feature of labor income was the very sharp spurt from first quarter to second quarter. These are seasonally adjusted figures, so the normal difference between winter and spring employment shouldn't enter into this.

Even allowing for the seasonal pick-up, non-agricultural employment increased by a full 3% from first to second quarter. In addition wages increased by more than 2%, making a 5.5% increase in labor income from quarter to quarter.

This is the sharpest rise, from one quarter to another, since 1950, when Canada was bursting into the defense effort (and the inflationary splurge) which followed the outbreak of the Korean War.

Hourly Earnings

From the last quarter of 1950 through to the beginning of 1952 average hourly earnings in manufacturing industry increased by more than 3% each quarter, with a peak of 4½% from spring to summer of 1951. This year's increase was barely 2½% from first to second quarter; but there have been some significant increases since.

The build-up of inventories in the first half of the year was another feature that recalled the post-Korean boom. In no intervening period has inventory accumulation been so large. But the first quarter rate (at $1,272 million) was much greater than the second quarter (at $744 million), when it amounted to about 2½% of total national expenditure.

The DBS Report comments:

"The high levels of final demand and accompanying rapid turnover gave rise to stock-sales ratios being generally somewhat lower than those for the same period of the last few years. In over-all terms, therefore, the higher level of inventories would not seem to be inconsistent with the expanding volume of business activity."

ANNOUNCEMENT

R. J. MacNEILL

D. B. Mansur, President, Consolidated Toronto Development Corporation Limited, is pleased to announce the appointment of R. J. MacNeill to take charge of the Company's mineral development activities.

Mr. MacNeill, a graduate in Geology from Queen's University and California Institute of Technology, recently resigned as Manager, Contract Drilling Division, Canadian Longyear Ltd., North Bay, Ont., to assume his new position. His previous associations with several major mining companies and governmental agencies have given him broad experience in economic geology and mineral exploration throughout Canada.

LATEST REPORT

Ask your Investment Dealer for the Latest Report and Prospectus of

CANADIAN INVESTMENT FUND

CALVIN BULLOCK Ltd.

Investments Rise 28%, May Beat 1929 Record

OTTAWA (Staff) — Not since 1929 has Canada put more than a quarter of its economic effort into capital investment. But 1956 may be the year to beat 1929's record.

The investment intentions of business, institutions and governments, as surveyed at mid-year, added up to $8 billion, a 28% increase over the record level of capital investment in 1955.

In the first half year, according to the DBS estimates of National Income and Expenditure, new business investment added up to about 22% of total national expenditure. Government spending on capital projects probably added the extra 3% to bring it up to 25%—or a little more.

DBS tries to adjust each quarter's figures to an annual rate, according to all the information it can collect about the latest seasonal patterns.

By its calculations, spending on business investment in the first half year was equivalent to an annual rate of $6,476 million. This is 6% short of the $6,920 million which was shown for the full year in the mid-year survey.

Government Spending

Investment spending by governments is not separated from other government spending in the National Accounts. But assuming that it also fell 6% short of the seasonally adjusted annual rate, then total private and public investment up to mid-year was running at about $7,400 million.

This would be 24.7% of gross national expenditure, which almost matches the 1929 proportion. The highest proportion of more recent years was just under 24% in 1953.

The effort to crowd in a capital investment program of $8 billion this year is probably more than the economy can stand, as the Department of Trade and Commerce warned in its mid-year survey.

At the second quarter rate of gross national product the full $8 billion program would have meant 27% going into capital investment. The actual proportions, as seasonally adjusted by DBS were:

—Non-residential construction took 7.7% of total Canadian spending.
—Machinery and equipment took 8.5%.
—Housing took 5.3%.
—Government investment (assuming fulfilment of plans pro rata) took 3.2%.

To some extent this method of measuring the part played by new investment in economic activity exaggerates its extent. That's because the total output of the Canadian economy represents this year only four fifths of the total goods and services used by Canadians. Imports added a full fifth to domestic output.

Measured against the total final demand, supplied by Canadian output plus imports from abroad, the investment comes to about one fifth.

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Toronto organization requires energetic experienced sales manager and coordinator for exhibit type shows. Applicant must be of senior calibre. Prepared to assume maximum responsibility. Man selected must represent us with dignity and decisiveness in dealing with senior executive.

BOX 3, THE FINANCIAL POST, TORONTO

Our Research Department Has Prepared a New Review

"IRON ORE IN CANADA"

This review underlines the important future for the fast growing iron mining industry in Canada, and includes brief analyses of the principal and potential producers.

Free copies are available on request

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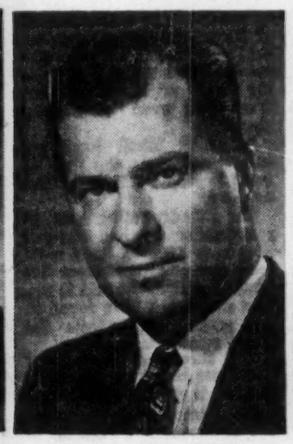
ANNOUNCEMENT

JOHN M. TODD

W. KENNETH DUFFIN



NORMAN W. MEALING

E. J. CHERNIS

Branch Executive Changes — Empire Brass Mfg. Co., Limited.

J. H. Stevens, President Empire Brass Mfg. Co., Limited, announced the following Branch Executive changes.

EDMONTON, Alberta. John M. Todd, presently asst. manager becomes branch manager. W. Kenneth Duffin of Ottawa Branch, becomes asst. manager at Edmonton.

OTTAWA, Ontario. Norman W. Mealing, transferred from manager, Edmonton to management, Ottawa Branch.

E. J. Chernis, of Emco Montreal becomes asst. manager at Ottawa.

These changes, and additions to the Emco Branch Management become effective September 1/56.

Additional Issue

$1,000,000
(50,000 shares)

Laurentide Acceptance Corporation Ltd.

(Incorporated under the laws of Canada)

$1.20 SERIES CUMULATIVE REDEEMABLE PREFERRED SHARES, 1956

(Par value $20 per share)

Preferred as to dividends and capital. Entitled to fixed, cumulative preferential dividends at the rate of $1.20 per annum per share, as and when declared by the Board of Directors, payable quarterly. Redeemable at any time in whole or from time to time in part on at least 30 days' notice at $21 plus an amount equal to all accrued and unpaid preferential dividends up to but not including the date fixed for redemption. These $1.20 series preferred shares which constitute one series of a total authorized issue of 250,000 series preferred shares will, when issued, be fully paid and non-assessable.

Sinking Fund

The Company is to set aside, not later than May 1st in each year, commencing in 1957, as a sinking fund, a sum sufficient to retire $30,000 par value of the $1.20 series preferred shares. The Company has the right to anticipate the whole or any part of any sinking fund payment by purchasing $1.20 series preferred shares at prices not exceeding the redemption price plus costs of purchase, provided that not more than one year's sinking fund may be so anticipated.

Transfer Agent and Registrar
Montreal Trust Company, Montreal, Halifax and Toronto

In the opinion of Counsel, the $1.20 series cumulative redeemable preferred shares, 1956 will be investments in which companies registered under the Canadian and British Insurance Companies Act may, without availing themselves for that purpose of the provisions of sub-section (4) of Section 63 of said Act, invest their funds.

We offer, as principals, these 50,000 $1.20 series cumulative redeemable preferred shares, 1956 subject to prior sale and change in price, if, as and when issued and accepted by us, and subject to the approval of all legal matters by Mr. Lucien Roux, Q.C., Montreal, Quebec, on behalf of the Company and by Messrs. McMichael, Common, Howard, Cate, Ogilvy & Bishop, Montreal, Quebec, on our behalf.

The Company has made application for the listing of these $1.20 series cumulative redeemable preferred shares, 1956 on the Montreal Stock Exchange and The Toronto Stock Exchange.

Price: $20 per share to yield 6%

Subscriptions will be received subject to rejection or allotment in whole or in part and the right is reserved to close the subscription books at any time without notice.

It is expected that interim share certificates will be available for delivery on or about October 1, 1956.

A Prospectus will be furnished promptly on request.

Gairdner & Company Limited — F. J. Brennan & Company Limited — Burns Bros. & Denton Limited

Lajoie, Robitaille & Cie, Limitée — Credit Canadien Inc. — Credit Anglo-Francais Limitée

Canadian Alliance Securities, Ltd. — René-T. Leclerc, Incorporée

ANNOUNCEMENT

V. F. RAYMOND

Mr. A. W. Bruce, Executive Vice-President and General Manager of Household Finance Corporation of Canada, announces the appointment of Mr. V. F. Raymond to District Supervisor in the Eastern Division, with headquarters in Montreal. Mr. Raymond has been associated with HFC since March, 1946. He was formerly manager of their branch office in Montreal, located at 7064 St. Hubert Street, and is a member of the Montreal Credit Grantors Association.

TIN MILL PRICES

The Steel Company of Canada, Limited, Hamilton, Ontario, announces that current prices for Tin Mill Products will continue to be effective for the period October 1 to December 31, 1956.

Present prices are F. O. B. mill, mill base prices, 100 lb. basis weight, per base box.

Common Cokes	$10.10
No. 25 Electrolytic	8.60
Tin Mill Black Plate	7.80

LABOR ROUNDUP By JACK MacARTHUR

Long Contract Mixed Blessing

Labor Stability With Inflationary Overtones

Here's why some economists are disturbed about the thinking behind long-term contracts between labor and management:

Suppose the Big Wheel Co. signs a five-year contract with its union, the United Wheel Makers, Helpers and Apprentices Union. Written into the deal is a general 10c wage increase in every year of the contract.

Thus a skilled wheelmaker will see his wages rise from $2 hr. to $2.50 hr. during the agreement. Carrying this thinking to its logical—or illogical—extreme, a $2 wage would be doubled in 20 years.

But will worker productivity double? What will happen to real wages as a result of inflationary or deflationary pressures during that period? No one really knows the answers to these questions.

Yet workers are encouraged by union and company to think in terms of fixed annual increases. They will give up that idea with great reluctance.

It is conceivable that only inflation will make it possible for the Big Wheel Co. to pay fixed annual increases without going broke. Thus the Big Wheel Co. may not be very co-operative in anti-inflation measures. Nor will the Union though it may scream about high prices.

This analysis doesn't apply to any actual case. But it raises real problems which may apply to many.

This Pushes Up Price of Iron

It's increasingly clear that the huge 61c-hr. three-year contract signed at **Marmoraton Mining**, Marmora, Ont. recently (FP, Aug. 11) is important.

—Keyed to U. S. wage levels as it is (Marmoraton is a subsidiary of **Bethlehem Steel**), it sets a stiff standard for other Canadian iron mines. Steelworkers Union already is exploiting this angle.

—It tends to raise steel costs, both by pushing up iron-mining costs and encouraging basic steel workers to want more money.

—It encourages all miners to want bigger wage gains.

—It breathes more life into the argument over whether Canadian firms can and should pay U. S.-style wages.

* * *

Old Story For Building Labor

This week, as Toronto's construction union troubles continued (FP, Sept. 15), some contractors began issuing gloomily pessimistic predictions.

Cost of apartment - building could rise 50%, said one, if companies are forced to use all-union help. Toronto might lose $100 million in new construction.

The situation is similar to dozens of other construction labor situations, past and present.

The unions are picketing and striking in an attempt to force greater or exclusive use of union members.

If they succeed, an old pattern develops. Non-union companies come in from outside or are organized, and are able to undercut many of the unionized firms. This is simply a matter of supply and demand.

Basic trouble, says one industrial relations expert, is that much of construction labor is overpriced in relation to its productive capacity; and a minority is underpriced.

Unions have concentrated on winning big gains for the majority membership. Meanwhile, experts — top-notch carpenters, for instance — are forced to accept lower wages than their due, as a means of partially subsidizing other more numerous, less skilled workers. In addition, this situation is undesirable because it offers insufficient incentive to acquire new skills or sharpen old ones.

* * *

Labor Briefs

If it stands, a recent judgment of Quebec City Superior Court probably will prevent use of Labor's Rand formula in Quebec. The Rand formula reasons that non-unionists in a mostly unionized plant benefit from increases won by the Union, yet pay no dues. Under the formula, dues are collected from non-union people, though they aren't forced to join the Union. The court ruling declares illegal compulsory check-off of union dues for non-unionists.

* * *

Slowly, the machinery of the various Canadian Labor Congress committees is beginning to roll.

Political education committee — a key group in view of the argument over endorsation of political parties — will have its first get-together Oct. 2-3; education committee had its first in Toronto recently.

Stemming from the latter, Labor will meet the universities in December in Ottawa to discuss the need for more educational facilities. Labor wants more federal aid.

* * *

Still no details on the "amicable settlement" between International Longshoremen's Association and Brotherhood of Railway Clerks in their dispute over Toronto waterfront control. CLC worked out the deal, thinks it will stick. It's inconceivable, however, that ILA has given up its ambition to control soon-to-boom Seaway ports.

Quebec Labor Milestone Will CCCL Marry CLC?

An era of labor strife in French Canada may date from a convention in Montreal next week.

Alternatively, the important convention of Quebec's Canadian and Catholic Confederation of Labor may decide that labor unity is all-important.

If the latter is the choice, the 90,000-member CCCL will get down to the task of integrating itself into the Canadian Labor Congress — the million-member united Canadian labor group formed only this year.

As background, this is fact:

- CCCL wouldn't even be considering submerging its special Quebec and Catholic nature in CLC, if it didn't live in mortal fear of disintegration under raiding forays from powerful CLC unions.
- To get into CLC, the CCCL will — sooner or later — have to make administrative and operational changes which will completely alter its nature. And it may have to make some concessions to CLC affiliates in the same labor fields as its own member-unions.

Constant meetings between CLC and CCCL leaders have been taking place. For instance, there was one last week, was to be another this week..

Meanwhile, CLC has been keeping its affiliates informed.

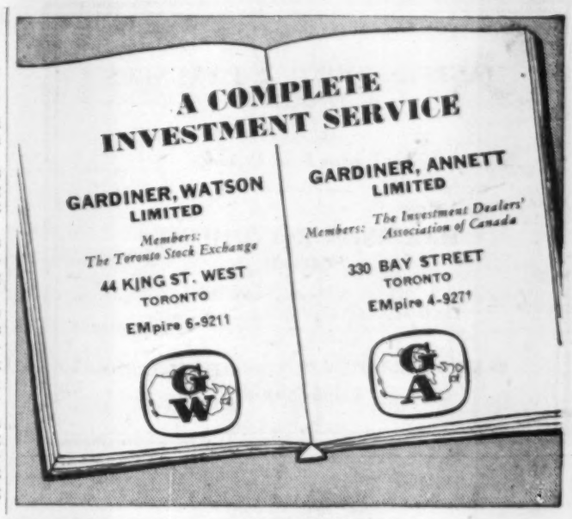
As an example, CLC chemical and pulp and paper unions want to know just what's going on between their top leaders and CCCL, which has members in these industries.

In both industries, CLC unions probably are capable of taking members from CCCL — or, at least, of trying hard to do so.

Part of the reason for this is CCCL mismanagement (or misfortune) in calling strikes during the past couple of years.

It seems that CCCL leaders next week will take the details of possible union with CLC before the convention. It doesn't appear a unity package is signed, sealed and almost delivered.

Much will depend on reaction of CCCL members to being caught between dislike of changing the status quo and fear that if they don't do it voluntarily it will be done forcibly.



ANNOUNCEMENT

NEW PLACEMENT SERVICE

JAMES W. SIMPSON

Mr. James W. Simpson, President, Leetham, Simpson Limited, Management Consultants, announced today the formation of a subsidiary division of the firm, EXECUTIVE PLACEMENT SERVICES. The new division, with headquarters in Montreal, will specialize in search and selection of Management and Executive personnel for Canadian industry. Brigadier C. Wallis (Ret.) will be in immediate charge of the new division.

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Interest rate at Chartered Trust will be 3% on all savings accounts effective September 15.

Interest will be paid quarterly on the minimum quarterly balance.

On new accounts opened before September 30th, interest at 3% will apply from September 15th.

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City of Hamilton
Treasury

TENDER FOR DEBENTURES

Sealed tenders addressed to Mayor Lloyd D. Jackson and marked "Tender for Debentures" will be received at the office of the Treasurer of The Corporation of the City of Hamilton, City Hall, Hamilton, Ontario, until 12 o'clock noon, Monday, September 24th, 1956, for the purchase of an issue of debentures of the Corporation of the City of Hamilton in the principal amount of $5,400,000.00, which will be a direct obligation of The Corporation of the City of Hamilton, according to the following schedule of maturities:

Maturity Date October 15th	Coupon Rate	Principal Amount	Maturity Date October 15th	Coupon Rate	Principal Amount
1957	4¾%	167,000	1967	4¾%	266,000
1958	4¾%	176,000	1968	4¾%	279,000
1959	4¾%	185,000	1969	4¾%	290,000
1960	4¾%	193,000	1970	4¾%	306,000
1961	4¾%	204,000	1971	4¾%	322,000
1962	4¾%	212,000	1972	4¾%	336,000
1963	4¾%	220,000	1973	4¾%	351,000
1964	4¾%	233,000	1974	4¾%	370,000
1965	4¾%	243,000	1975	4¾%	387,000
1966	4¾%	254,000	1976	4¾%	406,000

Detailed information concerning this offering of securities may be obtained from the undersigned.

PAUL HICKEY, C.A.
Treasurer and Commissioner of Finance.

Treasury, City Hall, Hamilton, Ontario.
Wednesday, September 19th, 1956.

Anglo-Rouyn Drifts 1,000 ft. Copper Assays Average 2.93%

Assays averaging 2.93% copper and 0.031 oz. gold are reported by **Anglo-Rouyn Mines** in drifting on the fourth level of its copper-gold property in Northern Saskatchewan.

These assays are over total length of 827 ft. and an average width of 7.6 ft. Drilling has been completed for 1,000 ft. — 500 ft. east and west from the crosscut.

In the west drift, over a length of 421 ft. and an average width of 7.8 ft., face samples averaged 2.52% copper and 0.029 oz. gold. In the east drift, over 406 ft. and an average width of 7.6 ft. assays ran 3.43% copper and 0.031 oz. gold.

Chip samples over the last 104 feet of the east drift on which assay results are available, returned 5.21% copper and 0.038 oz. gold.

A stub crosscut at the extreme end of the present west drift on the fourth level has exposed ore as it approached the hanging wall. The stub crosscut, 200 ft. west of the main crosscut, has also encountered good ore in the first two rounds, the company reports.

Crosscuts are being driven at 100-ft. intervals to the hanging wall of the ore zone to expose the true width of the ore at sections already shown by surface diamond drilling. True width exposed by the main crosscut on the fourth level was 16.4 feet.

The three-compartment shaft is being opened on four levels — at 175 ft., 280 ft., 392 ft. and 504 ft.

Although work is being concentrated on the bottom level, some 95 feet of drifting has been completed on the third level. Assay results over a zone length of 65 feet showed an average grade of 3.03% copper and 0.02 oz. gold per ton, across a true width of 9.4 feet. Values remained in footwall and hanging wall, since the true width of the ore zone at this horizon is 14 to 16 ft. as exposed by the crosscut.

Business Admin. Is New Windsor College Course

Courses in business administration plus a wide range of sciences are announced by Essex College, Windsor, Ont. Essex is a non-denominational college of Assumption University of Windsor.

Offered are:

—Honors courses in business administration and chemistry (four years after grade 13) leading to the degrees of B.Comm. and B.Sc.;

—General courses in business administration, biology, chemistry, laboratory technology, mathematics and physics plus pre-medical and pre-dental courses (three years after grade 13 or four after 12) leading to the degrees of B.Comm. and B.Sc.;

—Courses in nursing science leading to the degree of B.Sc.N. Two methods are offered: graduate nurses may obtain the degree in two years; the complete course for others extends six years from grade 12, of which three are spent in university, three in a hospital school of nursing.

—Two - year pre - engineering, pre-pharmacy and laboratory technician courses; one-year diploma course in nursing.

Essex College was incorporated in 1954; this is its first year of operation. There are three other colleges of Assumption University: Holy Name, Holy Redeemer and University Colleges.

Canada Safeway Sales Rise 8%

Sales of Canadian subsidiaries of **Safeway Stores Inc.**, Oakland, Calif., for the 36 weeks ended Sept. 8 rose 7.59% to $127.1 million ($118.1 million in comparable period a year earlier).

Safeway's Canadian sales rose proportionately more than those for the U. S. parent which increased 2.3% (including all subsidiaries) to $1,358.7 million ($1,328.1 million).

For the four weeks ended Sept. 8, Canadian sales were up 11.64% at $15 million ($13.5 million) and up 3% for parent and all subsidiaries at $154.8 million ($150.3 million).

Number of Canadian store locations in operation total 155 (146) and for the consolidated group 1,980 (2,009).

Sarnia Challenges Ontario Cities 'Get Out Vote'

Sarnia, bustling centre of Chemical Valley, has issued a challenge to the civic pride of 15 other Canadian cities of comparable size.

The challenge: Get out the highest percentage of eligible voters in the coming aldermanic elections.

The cities challenged: Brantford, Chatham, Cornwall, Guelph, Fort William, Kingston, Kitchener, Niagara Falls,, Oshawa, Peterborough, Port Arthur, Sudbury, St. Catharines, Sault Ste. Marie and Timmins.

Sarnia Chamber of Commerce, through C. C. Norsworthy, chairman of the civic affairs committee, issued the challenge to the Chambers of Commerce and Boards of Trade of the other communities. A suitable plaque will be presented to the winning board.

Announcing the challenge, Norsworthy said: "Civic election apathy has been apparent throughout the province for far too long. Municipal government has never been in such a financial strait-jacket as it is today and without too much hope for help from senior governments. Thus if cities are to continue to prosper they must have good government and good government can only come from strong mandates by the voters."

Foreign Exchange Rates

Noon Value in Canada
Week Ended Sept. 14, 1956

	U.S.$	U.K.£
Mon.	97 26/32	2.72 3/16
Tues.	97 25/32	2.72 3/16
Wed.	97 25/32	2.72 2/16
Thu.	97 21/32	2.71 10/16
Fri.	97 18/32	2.71 3/16
Ave.	97 113/160	2.71 68/80

U. S. rate reported by Bank of Canada.

U. K. bid rate reported by Toronto-Dominion Bank.

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Market Comment: a panel of outstanding Canadian investment advisers gives its interpretations of market trends.

Managed Investment: Watch the actions of the managers of the Compton and McNab accounts.

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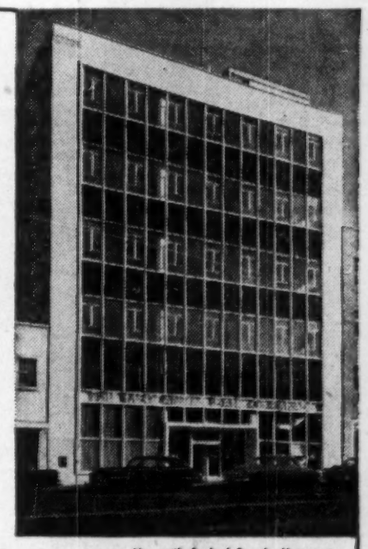
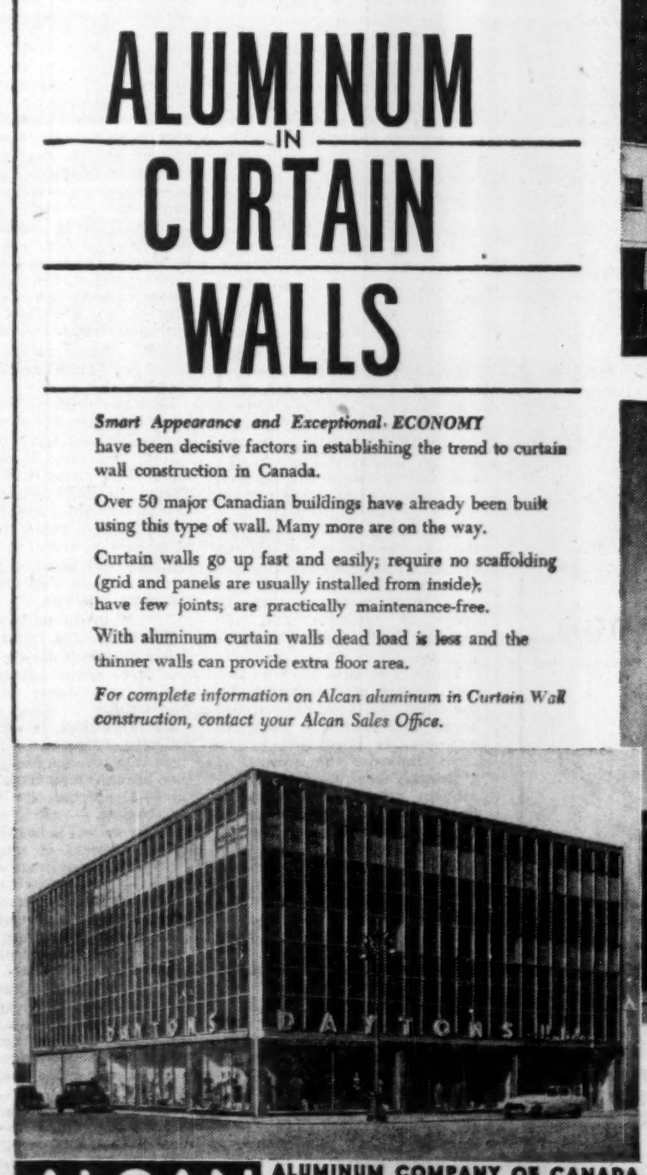
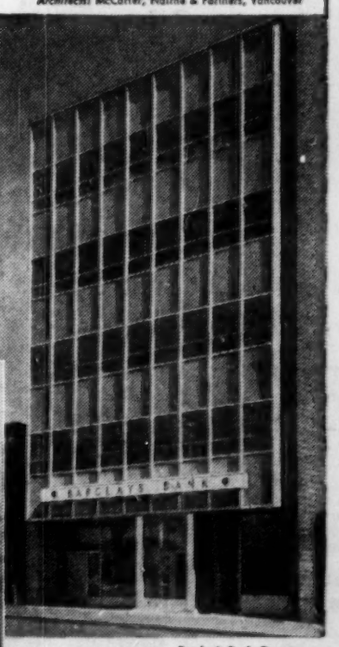


Mercantile Bank of Canada, Vancouver
Architects: McCarter, Nairne & Partners, Vancouver





Barclay's Bank, Toronto
Architect: Blake H. M. Tadman, Toronto

Dayton Building, Winnipeg
Architects: Green, Blankstein, Russell & Associates Winnipeg

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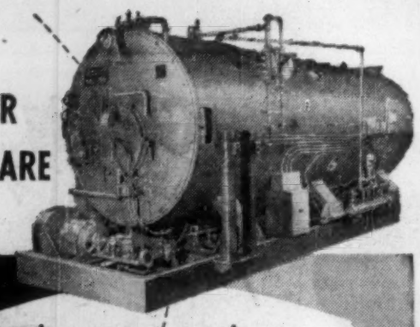

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INVESTMENT — IN PRINCIPLE AND PRACTICE

Huddle Now For Market Signals

Here's How The Dow Theory Can Help You Score More Points

By Pathfinder

Author of this special Post series on investing is one of Canada's prominent investment counselors. Daily he is dealing with a wide variety of investment problems and with big and little sums of money.

Phrases such as "confirmation of the trend," "testing of July highs," "resistance level," and "breakout on the downside," are usually just so many words to the average investor. He considers such phrases as part of a mystical language understood only by the high priests of finance.

In actual fact there is no reason why every investor should not be able to recognize and understand the meaning of these words which describe the technical action of the market.

The basis of the technical approach to the market (FP, Sept. 8) is the daily or weekly chart of prices and volumes. From these records of transactions certain patterns develop which foretell future price action. These relationships between prices and volumes are a guide to the future for both individual stocks and also averages of stocks which attempt to measure the movement of the whole market.

These averages are an interesting study in themselves, and there is no question of their essential place in the investment field.

The greatest profits are made by the most people when the market as a whole is rising. On the other hand, excellent stocks can fall drastically in price simply because the market falls.

The two problems of measuring the movement of the market and of using these movements to forecast future action have occupied the attention of many people for several decades. If a successful answer was found to both these problems, the discoverer would have no further investment worries.

Dow's Original Work

One of the original men to tackle these two problems was Charles H. Dow who began writing about his findings in 1900.

The first problem, that of measuring market movements, was solved by means of the famous Dow-Jones Averages. There are three of these: the Industrial Average (30 large representative industrial concerns), the Rail Average (20 prominent railway companies including the CPR), and the Utility Average.

Dow attached significance to the movements of the first two averages and after considerable study he evolved his Dow Theory. Subsequently, people like William Peter Hamilton and Robert Rhea modified and extended Dow's original work.

The theory states that any market rise or decline is broken intermittently by movements in the opposite direction. Dow classified these movements into three types:

Primary — with duration from one to five years.

Secondary — lasting three weeks to five months

Tertiary — day-to-day swings (with which the Dow Theory is not concerned).

If a downward secondary movement falls within the normal pattern of erasing one third to two thirds of the previous rise, following which the average moves on to a new high, then, with one proviso, a continuing primary bull market is confirmed.

If, on the other hand, the market fails to achieve new highs but fluctuates in the range of the secondary movement, a reversal may be expected. This reversal from a primary upward to a primary downward market is confirmed, again with one proviso, when the price breaks out on the down side through the level at which the market began its secondary rise.

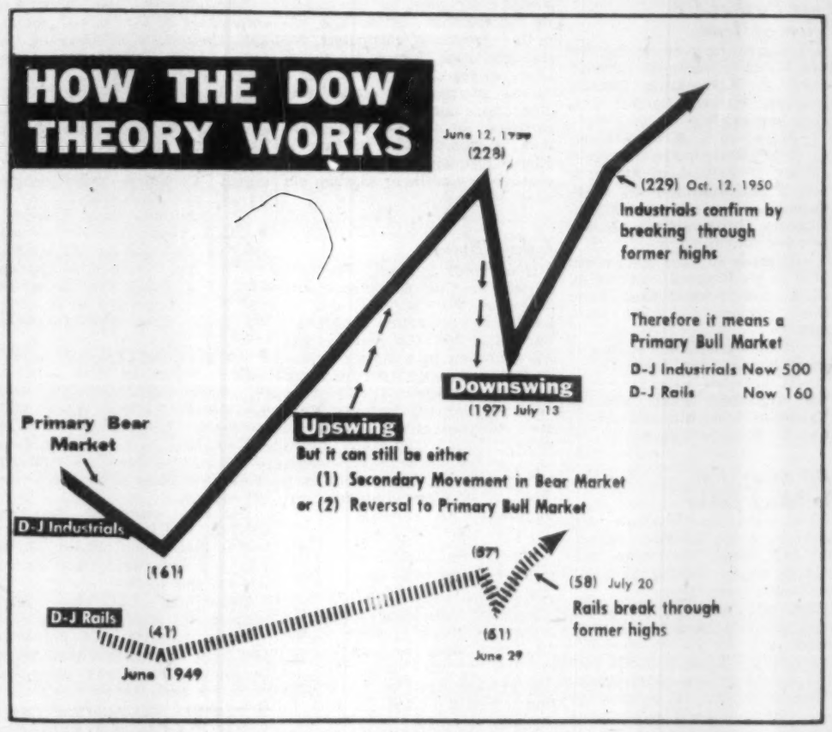
The one proviso is that the Rail Average must confirm the Industrial Average. This means that the Rail Index should also break through former highs in order to establish that the primary bull market is continuing.

There is no time limit on this confirmation of one average by the other, but it normally would occur well within a year. An example, as illustrated in the chart, indicates the reversal of a primary bear market, a subsequent secondary reaction to the bull market, and the ensuing confirmation of the bull market.

Main Weaknesses

One of the main weaknesses of the Dow Theory is its vagueness particularly about the duration of the primary and secondary movements. As a result, there is frequently disagreement among the advocates of this theory. Perhaps this vagueness is just as well however, because if the signals were precise and unmistakable, then everyone would be either a buyer or seller and all at the same time.

For those who might be concerned about this chain reaction, it is fair to say that even if a significant proportion of investors did become acquainted with the theory, there is sufficient ambiguity its signals that few would follow its instructions without some other outside reasons.



Another criticism is that the information about changes in market trends, while much more current than fundamental data such as earnings figures, is always indicated after the turn. For instance, the Dow Theory signals a primary bear market after the prices have broken through on the downside the levels from which they started the secondary upswing.

In this case the investor should unload his securities but, unfortunately, the market is probably at its most disorganized state and prices are falling steeply. On the other hand, Dow advocates would argue it is better to sell even under those conditions rather than to hold through the subsequent years of further decline.

Deep Insight

This matter of timing and the fact that confirmation by the other average might take valuable weeks or months points to a serious deficiency in the Dow Theory. This is that it places considerable emphasis on superficial facts such as new highs, etc.

The fundamental job of technical market analysis is to gauge the force of buying pressure versus selling pressure, and more sophisticated measuring tools are needed. Volume of transactions and the number of issues going ahead or declining are two such measurements which give a deeper insight into the technical position of the market.

Also the significance of the Rail Average has changed considerably since the turn of the century. At that time practically all raw materials and manufactured products moved by rail so the prosperity of the rail companies was a satisfactory index of the economy. However, with today's regulation of rail carriers, the unequal competition with road haulage and the increasing importance of air cargo, the confirmation of the actions of the Industrial by the Rail Average does not seem to be as significant as formerly.

Nevertheless, the average investor of today owes a debt to Charles Dow. He classified market movements and did some pioneer work in forecasting based on those market indicators.

Like any original work there were loopholes and weaknesses, some of which have been corrected, and some of which remain. Few claim that the Dow Theory in itself is the answer to investors' problems. However, this approach, using the record of market transactions and confirmation by another index, is a valuable contribution to investment analysis.

Main Advantages

Providing the vital job of interpretation is done well, there are three main advantages to use of this theory in market forecasting:

1—The signals are completely objective — the charts are not influenced by bullish or bearish temperaments.

2—The signals are relatively up-to-date — other advice as to buy or sell is based on facts several weeks or months old.

3—The signals are all-inclusive — the market rises and falls taking with it good and bad stocks. The reasons why the market moves are often so varied that an attempt to forecast on any other basis is bound to be incomplete.

What It All Means

With these advantages, and the previously mentioned disadvantages, the average investor can well ask what it all means to him.

To use a comparison, it is fair to say that the average common stock buyer would not ride in a car without a speedometer. To be sure, some estimate of speed could be made based on previous experience, and the comparative speeds of other cars if traveling along a recognized route. But if each succeeding mile took the car into stranger and stranger country, where the roads, laws, traffic, and other hazards all appeared different, then the investor would demand to know how fast he was going.

Precisely the same applies to his common stock holdings. The past is a guide to the present and the future, but to be meaningful, the past must be measured and be compared to the present levels.

The averages such as the Dow-Jones in the U. S., the Toronto and the Montreal Stock Exchange and the DBS averages in Canada, are just this kind of measuring device.

These averages should be used frequently for comparison with the progress of individual stocks and for forecasting the future market action. The Dow Theory is one method of probing into the future of the stock market.

Approximate Quotes
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		Bid	Asked
Supervised	Income Fund	$ 4.43	$ 4.47
"	Growth Fund	2.07	2.09
"	American Fund	6.29	6.35
(1953)	Executive Fund	36.66	
(1956)	Executive Fund	30.09	31.39

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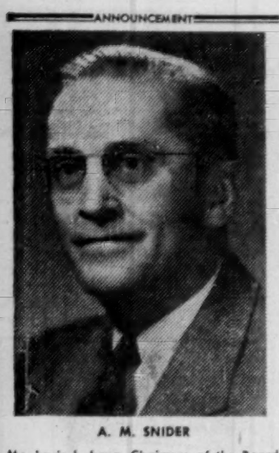

A. M. SNIDER

Mr. Louis L. Lang, Chairman of the Board of the Sunshine Waterloo Co. Limited announces the appointment of Mr. A. M. Snider of Waterloo, Ontario, as President of the Company.
Mr. M. F. Verity of Brantford and Mr. A. A. Thornbrough of Toronto have been elected to the Board of Directors.

FARCROFT MINES has suspended work on its New Brunswick base metal property and its Bancroft area uranium property, the annual report says. The New Brunswick claims were restudied and might be worth further detailed study. Balance sheet at March 31, 1956, shows cash of $10,558.

Wanted: Skilled Help

How Ottawa Gets Men

Some 13,000 graduates are expected from Canadian colleges next summer. They'll include:

- **About 2,000 engineers.**
- **About 1,250 other scientists.**
- **More than 900 commerce grads.**

For these few, competition will be keen; government as well as industry wants them.

Here is a special Financial Post report on the federal Civil Service and its recruiting plans:

By JOHN P. MACLEAN

OTTAWA (Staff) — In this year's scramble for university grads, the federal Civil Service will be in there pitching.

And it thinks it has a good chance of picking up nearly 5% of the crop.

With an average 8% pay boost in its pocket since last year — which it hopes has brought it almost to industry levels — CS will:

- Begin its recruiting campaign earlier than ever: About Thanksgiving for arts, New Year's for science (engineers know they're in short supply, take time to shop around).
- Offer foreign posts to top artsmen. It never has any difficulty filling these.
- Offer unmatched research facilities to would-be scientists if not always equal pay with industry.
- Hope this year it can fill some of the 800 positions in its backlog at the end of 1955.

CS isn't sure yet just how many grads it will want. This is because various department estimates aren't in yet, and it isn't known now whether Treasury Board will approve them.

But a good guess is that more than 600 grads could be signed up.

Last year, CS took 545 for career appointments — out of 3,114 who applied.

Behind CS's growing success in attracting high quality graduates is a growing impression in the minds of university graduates that CS is a good place to work.

As a top civil servant put it to the Financial Post: "We're no longer 'the last resort.'"

Skim Off Cream

Although CS can skim off some of the cream, like industry it hasn't as many university grads as it would like. And the shortages are in precisely the categories whose top students are no problem to CS: in commerce and engineering.

CS needs commerce graduates, not for overseas Trade Commissioner Service posts, but for the Ottawa tax office. That's because specialization in the department isn't as interesting and usually prevents getting a Chartered Accountant degree.

CS needs engineers. Like industry, its departments have grown, are planning and building projects across the nation, and there aren't enough engineers.

Here's the CS sales pitch as it will be delivered to '57 grads this fall and winter, the one you'll have to compete with:

1. It's very important for the welfare and future of Canada that you at least think of joining the CS. No matter what you're graduating in, you can probably fit in among the present 170,000 others who are also serving. "The best serve Canada."

2. You'll have the satisfaction of working for humanity at large without the hindrance of competition. And you'll have the inner satisfaction of doing a job well.

3. You won't get rich but you'll get a better than average wage and be able to live comfortably. Frankly, if it's just money you want, don't join CS.

Starting Salaries

Your starting salary will be:

—About $3,750 if you've an agricultural or arts degree.

—About $3,900 if you are one of the few who get taken for External Affairs or the Trade Commissioner Service.

There will be regular increases apart from increases due to promotions you earn.

You'll have security.

—We think our retirement plans match those in industry.

—And we're sure there'll always be a job for you. CS will grow for the foreseeable future, at about half the rate of population growth (FP, Feb. 4).

CS doesn't stress security. Like industry, it knows security does not mean much to 21-year-olds. But for those graduates who want to know, it will give the details:

—Pension contribution is 6% a year taken out monthly. The Government contributes another 6%.

—Pension rate is based on the best 10 years' salary.

—Retirement is optional at 60.

—Pension accumulates at 2% per year. For example, a civil servant with 35 years service would get 70% of his 10-year average every year he lived after retirement.

—Retirement on pension is possible before 60. One way is on medical grounds after 10 years. The other way, which doesn't often happen in practice, is if the man's job no longer exists and there's no room for him elsewhere.

—If the civil servant dies after 10 years, his wife gets half the accrued pension.

—Dependent children get 12½% each of the accrued pension up to the total value of the pension at the time.

—Lump sum death benefit paid to beneficiary. It's tied to salary after 10 years, goes as high as $5,000.

Fringe Benefits

You'll have additional fringe benefits:

—Three weeks' holidays a year.

—Sick leave. You can accumulate sick leave with full pay at the rate of 15 days per year. This means that if you have a serious illness you can take more than two months off with pay after five years, five months after 10 years.

For science graduates, there is excellent equipment to work with. National Research Council laboratory facilities are among the nation's best.

For top arts graduates there's the exciting prospect after a year or so training in Canada — during which you'll travel right across the nation learning about it first-hand — of foreign posts in either External Affairs or the Trade Commissioner Service.

For doctors there are a few openings each year at immigration centres overseas.

For engineers there may be the challenge of taking part in the nation's biggest construction projects from the St. Lawrence Seaway to moving the town of Aklavik, to building giant airfields.

This sales pitch, which will reach a peak this year, especially when engineering seniors begin making up their minds on job offers in January, doesn't bring all the graduates CS wants, CS admits.

But CS is particularly happy over one item: It's getting known among university graduates that CS actually does fire staff that doesn't measure up or won't carry its share of work.

Security and Probation

It's true that after a year or two a civil servant is relatively secure, but in the meantime he's on probation. This is good news to the confident university grad, shows him he'll be in alert, stimulating company.

Here's how CS keeps an eye on the newcomer's efficiency, according to a senior civil servant:

"By and large, a graduate hired is 'safe' for a year after he's taken on, provided he minds his Ps and Qs.

"At the end of the year, there's a departmental review of his progress, his development of skills and his personal qualifications.

"Then there's the assessment to find out whether he's a likely prospect in the long-range view.

"We can recommend:

—"Retention and encouragement. This is what usually happens. Most graduates taken on find themselves in a year, start moving up the ladder.

—"Accelerated promotion because of outstanding ability. This marks the newcomer as someone to be watched for a really top-level position some day. It applies to between 6% and 10% of those hired.

—"A further probationary period. A doubt exists about his work (a) because he isn't putting out or (b) because he's a slow starter who may do well later.

—"He be fired. He's a dud. We slipped up somewhere hiring him, or he isn't pulling his weight, or he's a square peg in a round hole and doesn't know enough to quit. Another 6%."

CS sometimes finds a square hole for the square peg and in another CS job, and sometimes he finds it for himself. But the figure is less than 5%.

If CS gets what it thinks is a reasonable share of university skillpower next spring, it will be pleased. For these reasons:

—It's convinced the taxpayer is entitled to be served by good men.

—It takes good men to work out Canada's future.

Civil Service Salaries

Here's what CS offers an engineer in starting salary and pay increases:

Starting salary next June will be about $4,470. CS sees this as an approximate figure, up from last year's $4,250 average, because there'll still be a shortage.

First raise comes automatically in six months, about Dec. 1957, will bring him to $4,710.

Next raise comes a year later, Dec. 1958, will bring him to $4,950.

By now he's moved up from Grade I to Grade II (or else has quit or been fired) and in July, 1959, will get a raise to $5,100.

Another raise comes in July, 1960 to $5,340.

Still another raise in July, 1961 to $5,580.

He moves up again to Grade III, gets $5,790 in July, 1962.

In July, 1963 he goes to $6,030.

In July, 1964 he gets a raise to $6,270.

But chances are he's already been promoted to Grade IV and will now get $6,600 — after seven years, by the time he's 28 years old.

This is only the level he reaches without any special effort.

He can go eventually to the deputy-minister level, at present about $17,500.

W. Plywood Net Profit $1.7 Million

MONTREAL (Staff) — **Western Plywood Co.** consolidated net profit for the seven months ended May 31, 1956 (subject to audit) was about $1,700,000 after provision for depreciation and depletion of $480,000.

After provision for taxes and dividend requirements on class A stock, the seven months' earnings on the 423,978 shares of class B stock now outstanding were at an annual rate of $3.58 per share, company reports.

Company produces upward of 65 million sq. ft. (1/16 in. equivalent) of plywood per month from three British Columbia mills. A new plywood mill at Edmonton will, when completed, be able to produce about 12 million sq. ft. of poplar veneer and plywood per month. Additional expenditures of $800,000 are expected to complete construction of the mill.

Capitalization as at June 30, 1956, comprised $2 million in first mortgage debentures; 80,000 shares of class A stock, and 600,000 authorized shares of class B stock (no par value, of which 423,978 shares were outstanding.

As at June 30, company and its wholly owned subsidiaries' outstanding long-term indebtedness amounted to $1,370,750.

The $2-million first mortgage debentures have been pledged with company's bankers as security for a loan. Under the arrangement company at any time on its request may borrow up to $2 million to provide funds for capital expenditures and for working capital. As at June 30, only $750,000 of this loan had been taken up with the balance available upon request.

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Investors Monthly Review

Our September issue provides a review of the up-to-date economic and financial factors affecting investment policy and contains a broad selection of Government, Municipal and Corporation Bonds. Preferred and Common Stocks.

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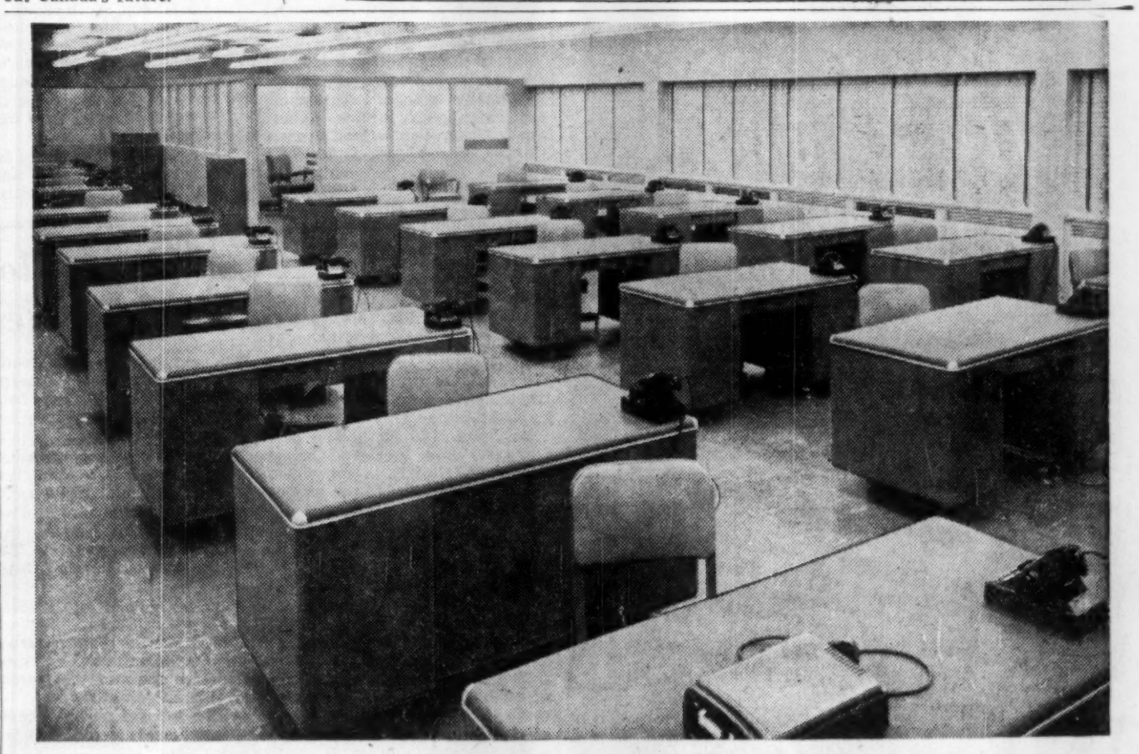

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Autumn Review . . .

The fall season is a particularly important one for retail sales, bringing with it the newest in models and fashions.

Some aspects of this season's business outlook are discussed in the current issue of our *Monthly Bulletin*. Also included is a brief review of the Departmental Store industry, with special reference to Simpsons, Limited.

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Corn Products, Refined Syrups, Study Merger

Discussions of a merger are reported to be in progress between **Corn Products Refining Co.** and **Refined Syrups & Sugars Inc.** Corn Products controls **Canada Starch Co.**, Montreal.

Basis of the proposed merger would be exchange of Corn Products' outstanding 8,207,050 common shares for the approximately 500,000 outstanding common shares of Refined Syrups. About two-thirds of Refined Syrups' common is reported to be held by Chairman C. S. Payson and family, while **Investors Diversified Services Inc.** holds its $750,000 5¾% cumulative preferred stock.

About 75% of Refined Syrups' annual sales of $35 million consists of liquid sugars for industrial users. Corn Products manufactures starches, syrups, salad oils, synthetic fibres and other products.

Late in 1954, Corn Products Refining Co. increased its degree of ownership of Canada Starch to 96.6% of the Canadian company's outstanding common stock.

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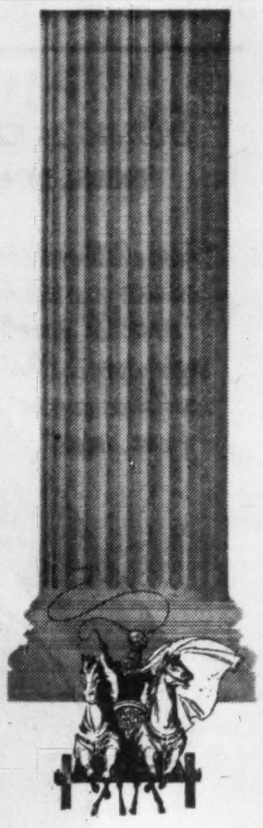

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If you are going to Europe, you ought to think about coming home the interesting way, via the Middle East, Australia (where platypuses are), the South Seas.

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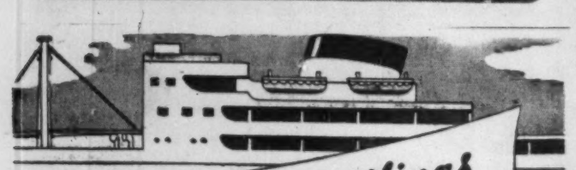

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POST TRAVEL BUREAU

Where to go - how to go - where to stay

Fall Visitors Find Bahamas In Full Bloom

By B. W. RIDDELL

Pirates, so the legends go, were the first to discover the true qualities of The Bahamas.

Long before more civilized folk had begun the fall and winter pilgrimage to find the sun, the pirate Blackbeard and his cut-throat crew were making use of Nassau's fine harbor.

Legend does not say if the pirates had a fashionable season. It's hardly likely. With no real social conscience, Blackbeard would have found the semi-tropical, summer - like climate ideal all year round.

Nowadays fall and winter is the fashionable time to visit Nassau. More and more Canadians and Americans want to escape snow and sleet at home. But the summer months are no longer in the tourist doldrums.

Autumn is becoming very popular. Visitors in September October and November find the hibiscus, frangipani, oleander and bougainvillia in full bloom. Beaches and golf courses are uncrowded and summer rates still in effect.

At this time of year, a double room with bath on Modified American Plan (no lunch) costs from $8 to $14 per person per day. Winter rates at most hotels are approximately 50% higher.

In Nassau there's every type of accommodation, mostly within walking distance of shops in the city. Most hotels and inns overlook the sea or are reasonably close.

Large, luxurious hotels such as **British Colonial, Emerald Beach, Fort Montagu Beach** and **Royal Victoria,** are self-contained resorts with private beaches, swimming pools, golf, tennis, cocktail lounges, and patios for dancing and dining.

Smaller hotels, guest houses and clubs — often charming old private mansions set in large estates — capitalize on the informal and personal touch.

Well-known, medium-sized and small hotels include **Buena Vista, Carlton House, Drake, Royal Elizabeth, Prince George, Parliament, Olympia, Towne** and **Windsor.**

Three smart residential clubs are the **Bahamas Country Club,** overlooking the sea and with a fine golf course; **Balmoral Club** in extremely attractive setting; and **Pilot House Club** adjacent to the Nassau Yacht Haven.

Housekeeping accommodations are popular in Nassau, especially for family groups. Attractive apartment-hotels include **Cable Beach Manor, Cumberland House, Hillside Manor** and **Grosvenor Close.**

Some well-known cottage colonies with maid service and private swimming close by include **Hibiscus Beach, Palmdale Villas, Little Orchard Cottages** and **Grosham. Loft House,** an attractive guest house near Government House and **Garden Cottages** are combined in one operation.

Historical Interest

Nassau, the three-century-old capital of a rapidly expanding, up-to-date colony, is steeped in history and romance. Besides the pirates who holidayed here, Spaniards called in to carry the natives off to work in the mines and sugar mills of Hispaniola. And after settlement by the English, Spanish and French marauders returned many times to harry the young community.

Fine old churches, dating from early days of settlement and beautiful colonial-style mansions line the streets of Nassau and there are some interesting forts to explore.

A very English city, cars and horse-drawn surreys drive on the left side of quaintly crooked streets. Plenty of pageantry centres around the governor and his court.

The city boasts fine shops offering British woollens, tweeds and doeskin; French lingerie, perfume and cosmetics; native shell jewelry and straw or sisal bags, and mats.

For shopping and sightseeing in Nassau and the 21-mile-long island of New Providence there are taxis and horse-drawn carriages. Or the tourist may hire a bicycle, motor bicycle or sports car.

One of the world's most fabulous beaches, Paradise Beach, is just 10 minutes by boat from Prince George's Wharf in the heart of Nassau. It has all the facilities — bath houses, cabanas, tennis courts, bar, restaurant, game rooms etc.

Fishing, Sailing

Besides water and beach sports, Nassau boasts some of the finest deep sea fishing in the world. Visiting fishermen will find a great many varieties of game fish in Bahamian waters—amberjack, African pompano, barracuda, bonefish and many more. Throughout the year there are a number of highly competitive tournaments in which visitors are invited to take part.

Sailing is popular and craft of different sizes and classes may be hired for varying lengths of time.

First rate restaurants in Nassau are not encouraged by hotels operating on the American, or modified American Plan (particularly during the winter). But hotel dining rooms serve excellent food and visitors should venture beyond their own. Cumberland House and Buena Vista are internationally famous for their fine Bahamian cuisine.

Try turtle soup, conch chowder, baked Nassau grouper or broiled native crawfish. And for dessert there's soursop ice cream or mango ice cream. Like Bermuda and many of the Caribbean islands, most food, other than fish, is imported.

Nassau, on New Providence Island, became the capital and centre in the early days of British settlement largely because of its fine harbor. But the 700 islands and 2,400 smaller cays that make up the Bahamas should not be forgotten. The outer islands are yearly becoming more important for tourism, residential real estate and general industry.

On Smaller Islands

On half a dozen or so of these islands there are about 30 small hotels, inns and guest houses. At the present time these islands primarily attract fishermen and tourists looking for seclusion, but each season they gain in popularity. Some of the best-known island accommodations are **Rock Sound Club** and **French Leave** on Eleuthera, **Grand Bahama Club** on Grand Bahama Island, **Light House Club** on Andros and **Pink Sands Lodge** on Harbour Island.

The Bahamas are attracting more visitors every year—with Canadians noticeably swelling the ranks of the tourists. And an increasingly large number of them return to settle permanently. Many wealthy Canadians have winter homes here; others are building small cottages and renting them for eleven months of the year. This pays transportation and other expenses for a month's Bahamian holiday for themselves and their families.

The Bahamas, with their many attractions, are only eight hours by air from Eastern Canada. **TCA** flies direct from Toronto or Montreal, via Tampa every Monday, returning on Tuesday. Return fare is $152.

BOAC has several weekly flights from New York, while **Pan American** leaves from Miami. Pan American may soon be making daily flights from New York.

For those who want a leisurely cruise, the luxury liner **S.S. Nassau** (Home Line) sails every Friday for New York except during October, when only two sailings are scheduled. The Queen of Nassau (**Eastern Shipping Corp.**) leaves Mondays and Fridays from Miami. Fares from New York range from $125 to $305 for de luxe accommodation. Rates from Miami are $35 to $89.

The Bahamas make an ideal holiday choice at any time of year. They have facilities to suit every taste and accommodation to satisfy every budget.

PEACE, quiet, white sand and warm sun: the goal of the fall and winter vacationer. They're all wrapped up in one package at Paradise Beach, a few minutes from Nassau in the Bahamas.

Canadians Flock to Hawaii In Sudden New Travel Boom

The next time you visit Hawaii, you'll probably meet someone from home. Canadians from both east and west have suddenly become aware of Hulaland.

The largest percentage increase from any area is now from Canada, says Walton E. Wood, assistant director of the Hawaii Visitors Bureau. In January this year 85% of the guests at **The Reef Hotel,** Waikiki, were Canadians.

While the majority of Canadian visitors are still from the West, Toronto, Montreal and Quebec are coming more into the picture.

Here are some of the reasons they find Hawaii attractive:

—Mild but refreshing climate the year round. Average temperature 75 deg.

—Flying time now takes only 7½ hrs. from Vancouver.

—Plane fares ($319 or $250 return from Vancouver) compare with continental rather than usual overseas rates.

—Hotel rates in Honolulu are very reasonable — first-class accommodation may be obtained for $10 to $12 double, European Plan.

—With bargain package tours, an eight-day, all expense (air transportation, hotel, sightseeing) visit from Toronto costs around $565.

And in Hawaii they have promoted the tourist trade by capitalizing on local color, such as the autumn Aloha Festival of old Hawaiian dances, feasts and pageants. Tourists have come in the traditional slump periods. Four years ago there were hardly any visitors in October. Last year there were 7,000 in that month alone.

Today 130,000 tourists (staying for more than two days) from all over the world, but particularly from Canada and the U S. mainland are spending $70 million a year in Hawaii. To accommodate them, new hotels are springing up all over Honolulu and in 1955 the number of hotel beds was increased 50%. So far this year there has been a 30% increase in traffic over 1955.

Airlines servicing Hawaii are **Canadian Pacific** and **Qantas Empire Airways** from Vancouver and **Pan American, United Air Lines** and **Japan Air Lines** from San Francisco, Seattle or Los Angeles.

Freight Symbols Speak All Tongues

MONTREAL (Staff) — A picture is worth a thousand words.

Working on this premise, the International Air Transport Association has developed a series of symbolic labels for use in air cargo shipments which, by virtue of pictograms, should be readily understandable in all countries of the world.

The latest three are designed to convey at a glance the following messages:

"This Side Up" — "Perishable Goods" — "Fragile."

The perishable goods sticker is the most recent addition. It depicts a carcass of beef, cluster of grapes, a fish and a flower in four separate diagrams surrounding the outline of an hour glass with its sands running out. The symbols are in blue on a white background and the sticker bears no wording except the name of the issuing airline.

The "This Side Up" sticker is also wordless, depicting a wide arrowhead in black and white.

Fragile is symbolized by a cracked wine glass but this sticker has the word "Fragile" imprinted on it in two languages.

The stickers, which are a minimum of four by six in. in size, are the result of extensive study by IATA's cargo traffic experts in the cargo handling and accountance working group.

The latest three follow on the heels of a series of labels issued earlier standardizing warnings designating restricted materials such as poisonous, explosive and radioactive substances.

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Vote For Hobo Benson And 5c Glass of Beer

Special Correspondence

WASHINGTON, D.C. — Most of the political noise made in the U.S. comes from the Democrats or the Republicans. The campaign is just getting under way and the front pages are filled with what Mr. Stevenson says about Mr. Eisenhower, or what Mr. Nixon says about Mr. Kefauver.

But have you ever heard of James Robert Allen, or Hobo Benson, or Darlington Hoopes or Farrell Stobbs? These gentlemen also are running for president along with Ike and Adlai.

There are a couple of dozen different parties offering candidates for president in addition to the Democrats and the Republicans. There is the Vegetarian Party, the Prohibition Party, the For America Party, the Constitutional Party, the Socialist Party, a Trotskyite party and the Hoboes of America Party.

No Taxes, No War

Some individuals even run for president without a party. The other day, James Robert Allen of Wilmington, Delaware filed a formal notice in Washington with the Clerk of the House of Representatives as required by law of any candidate for the presidency. Mr. Allen said he has received no contributions to his campaign as yet, while his expenses so far total $50. The candidate for the presidency presented a short and simple campaign platform: "No taxes. No war."

This "no tax" business seems to be catching on. The election in France not too long ago saw a campaign to get rid of income taxes have some measure of success with a number of candidates running on the "no tax" platform getting elected.

They may not get him elected, but the "no tax" supporters in U.S., running under the banner of the Constitutional Party, have chosen a candidate for president. He is T. Coleman Andrews. Mr. Andrews is totally against income taxes. They destroy initiative, cost too much to collect and were invented by left wingers, according to Mr. Andrews. Now, this kind of talk is a little confusing because until recently, Mr. Andrews was the chief collector in the United States Government. He was the Commissioner for Internal Revenue. But he got so fed up with his job that he quit and now is running for president on a "no tax" platform.

Mr. Andrews also is running for president on another platform of another party. This is the For America Party, an extreme right wing group. The former chief tax collector is the only man running for president on the tickets of two different parties.

Trotskyite Seeks Votes

The Trotskyites, running as the Socialist Workers Party, are represented in the 1956 Presidential Sweepstakes by Farrell Dobbs of New York City. Mr. Dobbs ran in 1952, too, and didn't do badly at all considering his name was only on the ballots of seven states. Altogether the Trotskyite candidate got slightly more than 10,000 votes for president.

There are other candidates and other parties who have offered themselves for the highest office in the land, including Daniel Murphy and his Vegetarians, Homer Tomlinson's Church of God Bible Party, Henry Krajewski and his Poor Man's Party and Ellen Jensen of the Washington Peace Party.

Hoboes of America Party

But probably the most colorful party in this election is the Hoboes of America Party. Its candidate, Hobo Benson, does not plan a strenuous campaign. "Too much like work," he told his organization's recent convention in Britt, Iowa. But he's running on a platform that's a powerfully attractive vote getter.

He stands four square for a four hour work day, four days a week and three month's vacation with pay every year. He's advocating a minimum hourly pay rate of $1.50; $100 for everyone over 60 years of age; and 100% Americanism.

Other parts of his platform include a call for a return of the five cent glass of beer, bigger handouts and cushions for boxcars.

With this kind of a platform, Hobo Benson might wind up giving some tough competition to the other candidates, including those fellows named Eisenhower and Stevenson.

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NOTICE OF SALE

THE MONTREAL METROPOLITAN COMMISSION

$3,872,000.00 – Serial Bonds – %

Notice is hereby given that sealed "Tenders for Bonds," addressed to the Montreal Metropolitan Commission shall be received by the latter at its office, 506 Ste. Catherine Street East, Montreal, until eleven o'clock in the forenoon, September 26th, 1956, for the purchase of $3,872,000.00 of serial bonds issued by the said Commission.

The bonds shall be issued in denominations of $100.00 each or any multiple of this amount at the choice of the purchaser, with interest coupons payable on the first of May and the first of November of each year, may be registered as to principal, shall be dated May 1st, 1956, and shall mature as follows:

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November	1955	.....
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The bonds may be redeemed before their maturity in whole or in part at their nominal value and accrued interest at any interest maturity date but not before the year 1961.

The principal and the interest shall be payable in lawful money of Canada at the principal office of Bank of Montreal, the Royal Bank of Canada, National Canadian Bank or Provincial Bank of Canada in the cities of Montreal, Quebec or Toronto at the holder's option.

Each tender shall specify the interest rate or rates (which shall be a multiple of ¼ of 1% and shall not exceed 5%) to be borne by the bonds and the price expressed in Canadian dollars (exclusive of accrued interest) to be paid to the Commission for the bonds and shall provide that accrued interest from May 1st, 1956, to the date of payment therefor and delivery thereof will be paid to the Commission.

All tenders must be for the total amount of the issue.

Each tender must be accompanied by a cheque drawn on a chartered bank doing business in Montreal and certified by it, equal to 1% of the principal amount of the present loan.

The cheque deposited by the tenderers whose tenders have been rejected shall be returned to them without delay, and that of the successful tenderer will be retained by the Commission to be applied in part payment of the purchase price of the bonds or to secure the Commission against any loss resulting from the failure of the tenderer to comply with the terms of his tender.

The Commission does not bind itself to accept any of the tenders.

Each tender must be made on forms furnished by the Commission. Such forms may be obtained at the office of the Commission, 506 Ste. Catherine Street East, Montreal. The prospectus and any other details concerning the present issue may also be obtained at the office of the Commission.

The municipalities subject to the control of the Commission that is: the Cities of Westmount, Outremont, Verdun, Lachine, St. Laurent and St. Michel, and the towns of Montreal-West, Hampstead, LaSalle, St. Pierre, Mount-Royal, Montreal-East, Pointe-aux-Trembles and Montreal-North, including the city of Montreal, are jointly and severally responsible for the present loan.

The tenders shall be opened at a public meeting of the Commission to be held on September 26th 1956, at eleven o'clock in the forenoon, at the office of the Commission, 506 Ste. Catherine Street East, Montreal.

The Commission will pay all expenses in connection with the preparation, issue and delivery of interim and definitive bonds and the exchange of interim bonds for definitive bonds.

THE MONTREAL METROPOLITAN COMMISSION
(Signed) EPHREM BRISEBOIS,
Secretary-Treasurer.

Canadair May Get Major Air Contract

MONTREAL (Staff) — There were signs this week that a major new aircraft contract might blow the way of **Canadair Ltd.**

Reason: Company was opening its first office in Ottawa and a former senior RCAF officer has been appointed to a new post to facilitate dealings with the Government.

Contract: To produce a military version of the **Bristol Britannia** for the RCAF Transport Command, through the Department of Defense Production.

Canadair is now producing a maritime reconnaissance version of the big aircraft. The plane, the CL-44, would be big, 125 to 150 persons, have turbo-prop engines similar to the Bristol Proteus which now powers the Britannia.

The plane might be for troop, cargo, or both; or passenger. A **Bristol Aircraft Ltd.** official said company had been in touch with Canadair about possibility of producing the military transport version of the Britannia.

One of the problems has been associated with the type of engine. While a long range aircraft, the range will be determined by the engine and the load. The new commercial version of the Britannia in England will have a range of 7,000 miles.

Although there has been no announcement from Canadair, Peter G. Masefield, managing director of Bristol Aircraft, said here that the military version of the Britannia was expected to go into production soon at Canadair. A contract would have to be given by the Department of Defense Production.

20 Years RCAF Service

In the appointment of C. F. Fincham, a recently retired RCAF officer, Canadair will have a man in Ottawa who has been closely associated with the RCAF for many years. He was in charge of aircraft programming in the supply branch of the Air-Force for the past five years.

Fincham joined the RCAF in 1937 and during World War II served in RCAF with missions to other air forces throughout the world.

In his new post, he will be assistant to the vice-president of sales, Peter H. Redpath.

Nfld. Logging Pact Aid To Plywood Firm

Newfoundland's government - sponsored birch logging enterprise is expected to show a profit following agreement between the **Bowater Corp.**, Corner Brook, **Anglo - Newfoundland Development Co.**, Grand Falls, and **Newfoundland Hardwoods Ltd.**, the operators of the plant at Donovans, Newfoundland.

The two companies have agreed on a program for supplying Newfoundland Hardwoods with a total of 10 million feet of birch a year. Formerly the plant's supplies of birch were in the hands of several hundred independent contractors. The cost and the shortage of logs threatened the success of the plywood, flooring and door business being carried on at Donovans.

Commenting on the new agreement, Newfoundland's Premier Joseph Smallwood said: "I believe that this new move may mean the beginning of a great new success for the birch plant."

These Debentures having been sold, this advertisement appears as a matter of record only.

New Issue

$20,000,000

Northern Electric Company, Limited

4½% Sinking Fund Debentures

To be dated November 1, 1956 — To mature November 1, 1976

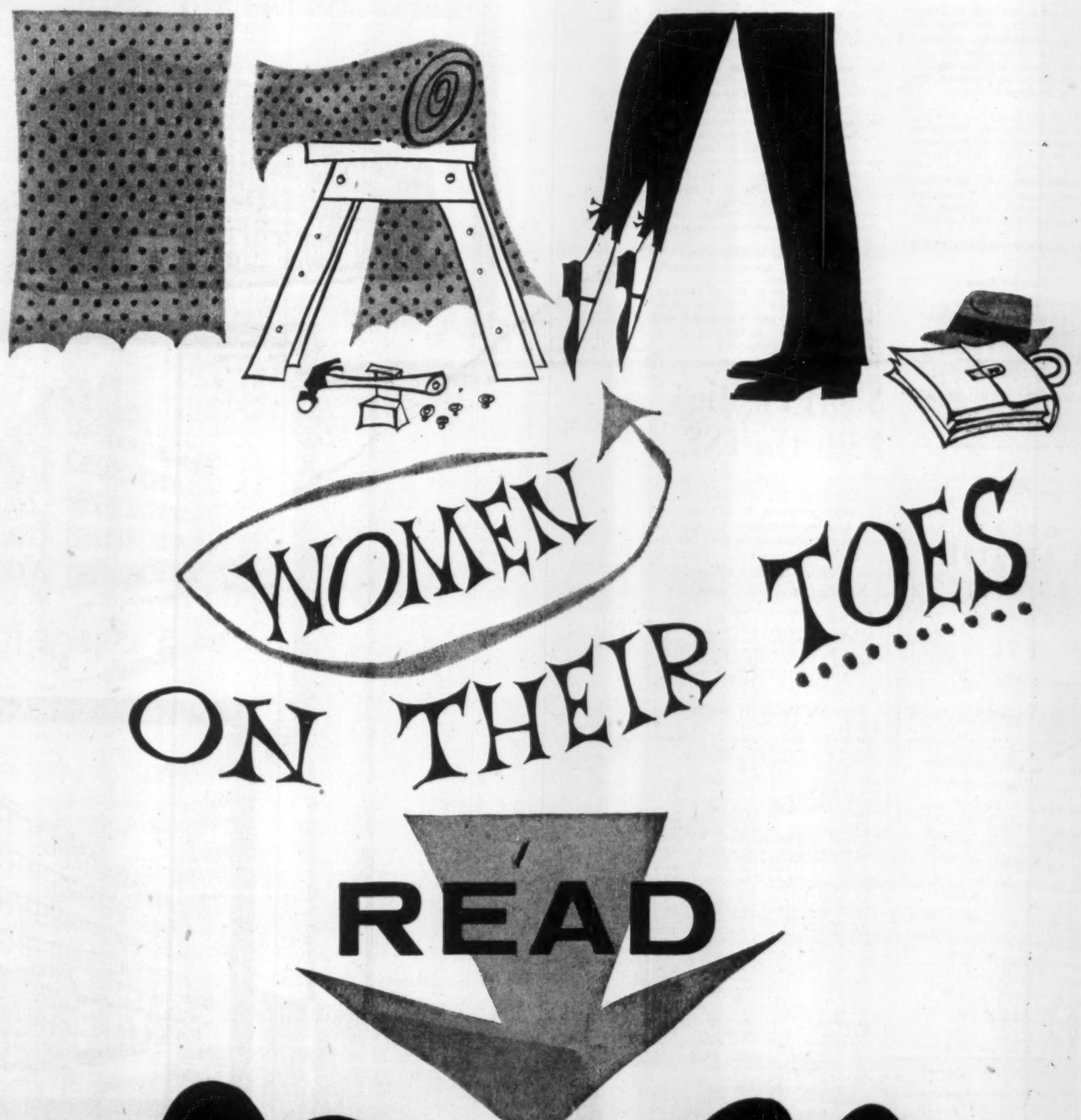
In the opinion of our Counsel, these 4½% Sinking Fund Debentures will be investments in which the Canadian and British Insurance Companies Act states that companies registered under Part III thereof may, without availing themselves of the provisions of sub-section (4) of Section 63 of the said Act, invest their funds.

Price: 100 and accrued interest

We, as principals, offered these 4½% Sinking Fund Debentures, subject to prior sale, if, as and when issued and accepted by us, and subject to the approval of all legal details by Messrs. McMichael, Common, Howard, Cate, Ogilvy and Bishop, Counsel for the Company, and by Messrs. Blake, Cassels & Graydon on our behalf.

A. E. Ames & Co. Limited

Dominion Securities Corpn. Limited — **Greenshields & Co Inc**



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The Hotel de LaSalle is a big little hotel with only 200 rooms—all with bath or shower, some with both. Two lavish penthouses and several suites are available—some with television. As our guests say: "There may be larger hotels in Montreal—but none quite like the LaSalle!"

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- ☐ Canada's National Debt
- ☐ Renewed Expansion in Canadian Business
- ☐ The Trend to Bigger Cities
- ☐ The Canadian Market for Automobiles
- ☐ Canada's Changing Population
- ☐ Canada's Trade with the Caribbean
- ☐ The Last Best West

ANNOUNCING

Important appointments in Canadian Industry, Finance, Business and Government

Abstainers' Insurance Co. (Simcoe, Ont.)—Dr. R. G. Hare, president; Arthur Blair, general manager.

Anderson Pontiac GMC Ltd. (Toronto)—R. D. Scott, president.

Ansco of Canada, Ltd. (Toronto)—Fred A. Cripps, vice-pres. and general manager.

Blackwood, Morton & Sons (Canada) Ltd. (Ste. Therese, Que.)—W. F. Leishman, representative for Ontario.

British Rubber Co. (Lachine, Montreal), Concord Rubber Ltd. and Huron Manufacturing Co.—T. R. (Tom) Fitzsimmons, central district sales manager, headquarters Toronto, following resignation of C. A. J. Dunbrook.

The Building Centre (Toronto)—Roderick Macdonald, director.

S. W. Caldwell Ltd. (Toronto)—J. R. (Bud) DeBow, formerly with sales department, Screen Gems, joins firm to establish and manage Montreal office.

Canadian Bank of Commerce (Toronto)—M. Wallace McCutcheon, vice-pres. and managing director, Argus Corp etc. director.

Canadair Ltd. (Montreal)—C. F. Fincham, head of new office opened in Ottawa and to be special assistant to Peter H. Redpath, vice-president sales.

Canadian Kellogg Co. (Toronto)—E. W. B. Kleinsteiber, manager procurement; T. L. Lech, manager of accounting.

Canadian Westinghouse Supply Co. (Hamilton)—Stuart C. Smith, manager consumer products division.

Dow Chemical of Canada Ltd. (Toronto)—LeRoy D. Smithers, president and chief executive officer, replacing N. R. Crawford, elected chairman.

Foundation Co. of Canada (Montreal)—J. R. Mills, president and director Geocon Ltd., a vice-president.

Great-West Life Assurance Co. (Winnipeg)—D. H. Scott, formerly Vancouver branch supervisor, to be branch manager, Fort William, Ont.

Greenshields & Co. (Montreal)—George Cretzianu, manager research department, a director.

Gutta Percha and Rubber Ltd. (Toronto)—A. P. Dawson, vice-pres. marketing, to be vice-pres. and general manager.

International Nickel Co. of Canada (Copper Cliff, Ont.)—Kenneth B. Young joins staff Canadian Development and Research Division.

International Paints (Canada) Ltd. (Montreal)—C. H. Neroutsos, formerly vice-pres. and managing director, to be president and managing director succeeding J. H. Davey, who retires as president but continues as director; C. A. Richardson, former general sales manager, to be vice-pres. and director.

John Labatt Ltd. (London, Ont.)—N. E. Hardy, general manager, Ontario division.

Arthur G. McKee & Co. of Canada (Toronto)—Carl L. Nilson, general manager, new Canadian engineering office, at Queens Quay and York St. Toronto.

Merrill Lynch, Pierce, Fenner & Beane (New York)—A. G. Lang, manager, Toronto office, succeeding T. Gordon Crotty, deceased.

Minneapolis-Honeywell Regulator Co. (Toronto)—William Bartlett, sales manager, Heating Controls Division, Central Region; Frank Caldwell, district manager, Hamilton area.

Northern Ontario Natural Gas Co. (Toronto)—J. W. Tomlinson, vice-pres. and chief engineer.

Regent Refining (Canada) Ltd. (Toronto)—C. H. Dodson, president and director succeeding Reuben Rosefield, former president, who becomes chairman.

Royal Bank of Canada (Montreal)—T. H. Cummings, manager securities department, head office, succeeding H. P. Glencross, retired.

Royal Typewriter Co. (Montreal)—Leonard C. Bowen, formerly managing director to be a vice-president, of Royal McBee Corp. of Port Chester, New York, of which Royal Typewriter Co. is a Canadian subsidiary.

Sicks' Breweries Ltd. (Calgary)—N. E. Whitmore, to be vice-pres., Sicks' Regina Brewery Ltd.; T. E. Sick, recently made a director, to be assistant to the president, N. A. MacPhee of Calgary, in charge sales and advertising for Sicks' five plants in British Columbia, Alberta and Saskatchewan; Jack Lakie to be manager Sicks' Regina Brewery Ltd., succeeding T. E. Sick. All effective Oct. 1.

Smith-Corona (Canada) Ltd. (Toronto)—A. I. Grosvenor, manager supplies and service division, continues as general service manager for Canada; R. G. Stephenson, sales manager, portable typewriter and adding machine division.

Sun Oil Co. Ltd. (Toronto)—Fred G. Crosby, general sales manager.

Travelers Insurance Companies (Hartford, Conn.)—Frank P. Gauer, manager casualty, fidelity and surety, and fire and marine lines at Vancouver branch; J. W. Lehrle, office manager replacing Mr. Gauer.

Union Carbide Canada Ltd. (Toronto)—E. L. Littlejohn, manager public relations; will co-ordinate advertising and public relations matters for Union Carbide and its

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In practical, everyday language, this course enables you to obtain a clear understanding of investment terms, principles and procedures, and their use in the wise investment of your money.

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Short Position Falls On TSE

Semimonthly report of short positions on the Toronto Stock Exchange at Aug. 31, eliminating odd lots on members' books, aggregated 964,500 shares of 183 issues, compared with 1,102,800 shares of 184 issues on Aug. 15.

Among the changes were:

Stock	Shares	Stock	Shares
B A Oil	—500	Expl All	+29,300
Con Regct	+15,500	Int Nickel	+300
Dom Tar	—4,800	Massey-H-F	—300
Do rts	—700	Mackeno	+16,500
El Pen-Rey	—101,200	Maybrun	—12,400
		Pathfinder	—20,300
		Triad	+1,000

Here are the short positions in detail:

Stock	Shares	Stock	Shares
Acme	5,000	Int Nickel	700
Algom	2,600	Iron Bay	100
Am Leduc	5,100	Jaye	500
Anacon	300	Jeanette	14,300
Ang Rouyn	700	Joliet	64,400
Apex	3,000	Jonsmith	1,500
Arcadia	2,500	Kerr-Add	100
Asbestos	200	Kirk Hudson	2,700
Atlas Steel	25	Kirk Miner	2,000
Aubelle	2,000	Kroy	18,100
Aumaque	2,500	Lk Dufault	14,200
Avillabona	2,000	Leitch	300
Bail-Selb	6,500	Lencourt	2,000
Banff	1,400	Lexindin	1,000
Barvue	1,300	Liberal	1,400
Base Metals	500	L. Long Lac	600
Beattie-Duq	46,900	Lomega	1,500
Belcher	19,500	Lorado	300
Bell Phone	275	Lyndhurst	1,400
Bethlehem	1,500	Mackeno	17,000
Bicroft	400	Massey-H	2,800
Bidcop	500	MacMillan B	500
Bouzan	3,800	Maritimes	2,000
Brilund	200	Martin	500
B A Oil	250	Maybrun	25,200
B C Power	200	Meta	1,000
Brunhurst	1,000	Midrim	7,200
Brunsman	500	Mill City	500
Brunston	3,000	Milliken	3,300
Can Cement	50	Mining End	500
Can Southern	200	Morrisson B	200
Cdn Breweries	25	Nama Creek	100
Cdn Devonian	100	Nat. Steel C	200
Canadusa	100	Nesbitt	100
Can-Met	300	N Bristol	500
Cassiar	500	New Delhi	400
Cent Leduc	1,300	N Highridge	4,500
Centremaque	500	N Jason	11,000
Chateo	300	N Manitoba	2,800
Chem Res.	7,200	Nickel Rim	4,300
Chib Expl	300	Nisto	1,000
Chib Jaculet	4,900	Nor-Acme	1,000
Cody-Reco	1,500	Noranda	750
Coldstream	300	Normetal	1,000
Con		Norpax	13,100
Bellekeno	8,800	N. Cdn. Oil	900
Con Callin	500	N. Rankin	2,700
Con Denison	1,500	Northspan	300
Do wts	3,300	Ogama	6,000
C Halliwell	9,600	Omnitrans	1,000
C Howey	5,000	Ont. Jockey	3,000
C. Nicholson	1,000	Opemiska	4,300
C Northland	1,000	Pac. East.	1,000
C Paper	50	Pac. Pete.	2,200
C Ragcourt	35,500	Pathfinder	3,300
C Sannorm	1,500	Paymaster	500
C Tungsten	1,000	Pitch-Ore	2,000
Coppercorp	2,700	Prospectors	800
Coppercrest	500	Que. Chib.	10,200
Corby Vet	300	Quemont	1,000
Coulee	300	Rare Earth	21,100
Cusco	1,000	Rayrock	1,500
D'Aragon	11,500	Sand River	4,500
Del Rio	1,100	Sapphire	2,100
Dome	100	Scurry	95,300
Dom Stores	50	Security	200
Duvan	600	Sherritt	6,000
Dyno	2,500	Silanco	500
East Asbest	2,000	Silver Mill	13,700
East Mining	1,000	Stanleigh Ur.	100
El Pen-Rey	154,000	Starratt	1,000
El-Sol	7,000	Steeloy	2,000
Eureka	2,000	Steep Rock	3,800
Expl All	32,800	Sturgeon Riv.	500
Faraday	500	Sylvanite	400
Fargo	1,000	Taurcanis	500
Francoeur	500	Teck-Hughes	100
Frobisher	100	Temagami	700
Geco	200	Thomp.-Lund.	2,600
Glenn Ur	1,800	Trans C. Expl.	100
Gr. Lakes	300	Trans Mount.	525
Gr Sw Grass	12,100	Trans Prair.	200
Greyhawk	10,500	Triad	1,000
Gunnar	500	Un. Asbestos	40,800
Do wts	100	Un. Keno	1,200
Harrison M	900	Vandoo	500
Headway	8,400	ViolaMac	2,500
Heath	1,500	Walker G&W	300
Heva	500	Werner	10,000
Highwood	500	West. Naco	100
Imperial Oil	1,800	Zenmac	9,000
Indian	6,500		
Ind Accept	200	Total	964,500

Put your business on the map

IN ONE OF THESE SUPERB NEW OFFICE BUILDINGS... OUTSTANDING PRESTIGE ADDRESSES
IN THREE OF MONTREAL'S CHOICEST LOCATIONS OUTSIDE THE HEAVILY CONGESTED 12 M.P.H. DOWNTOWN ZONE.

Much of any city's growth looks haphazard—and, of course, it is. But the map of Montreal reveals that intelligent planning is capable of solving some of the worst problems that bedevil modern business.

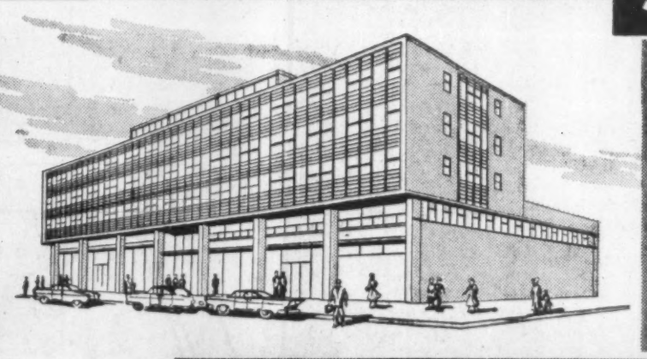
It is hardly surprising that these problems are incapable of full solution in terms of yesterday's outmoded city with a single "downtown" business district. Traffic congestion, parking and transportation problems, for instance, have been alarmingly underscored of late by the now serious shortage of skilled employees. The pressure of new circumstances is producing new solutions to meet the realities of today. Take these three new buildings as an example.

Each is based upon study and analysis of urban trends—including new patterns in transportation, communications, employment and the people's changing way of life. Each, therefore, grows out of a logical need for first-class space in a particularly well-endowed business area. And each affords an unusually good solution to the problems noted above—viable not only now but for years to come.

Perhaps most important for the success of your business, *each of these buildings solves for you the problem of trained technical and office staff.* For it stands to reason that people prefer to work close to home, avoiding tiring rush-hour travel, gaining extra leisure. And it follows that firms who make this possible get the pick of employees and enjoy at the same time the benefits of enhanced efficiency and higher morale.

These modern, fireproof elevator buildings are designed to the highest modern standards . . . with distinguished entrances and lobbies, sound-deadening floor and ceiling treatment, ribbon fenestration, latest type fluorescent lightings, finest electrical floor duct system, perimeter heating and scrupulous maintenance by experienced staffs. All offer exceptionally flexible space suitable for use open or partitioned, as desired.

SNOWDON



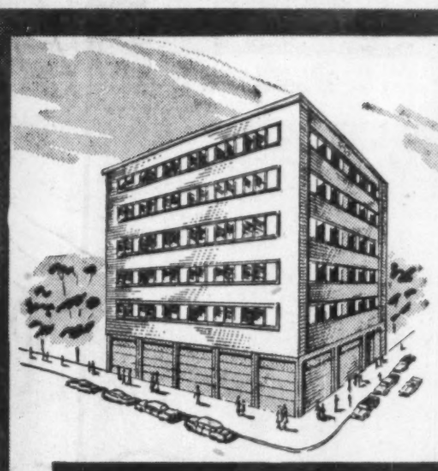
The 4950 QUEEN MARY ROAD Building

In the heart of Snowdon, Montreal's unique "city-within-a-city". Indoor and street parking. Astride traffic arteries to all parts of the city and beyond. Pool of high-grade, experienced office workers in adjacent residential suburbs. Facilities for private washrooms and for mechanical ventilation of vaults, corridors and inside space.

NOW AVAILABLE *For Immediate Occupancy*

OFFICE SPACE — Up to 10,000 FT. PER FLOOR
MEZZANINE SPACE · High ceiling STORE SPACE

NORTH END



The 445 JEAN TALON WEST Building

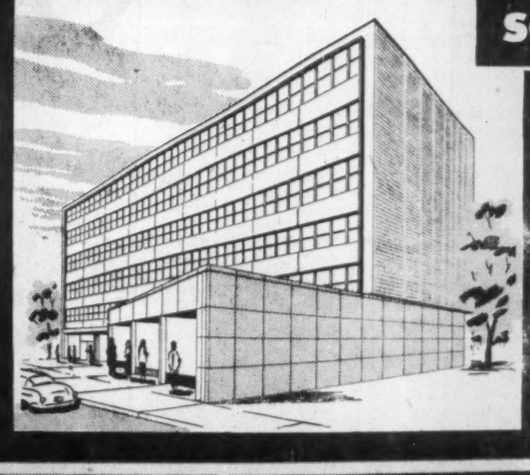
Well located at a rail and road junction in an established business centre in Montreal's flourishing "north end". Just minutes from Town of Mount Royal and other surrounding white collar residential areas. Unusually good off-street parking facilities.

NOW AVAILABLE

OFFICE SPACE — Up to 4,000 FT. PER FLOOR
STREET-LEVEL STORE SPACE

For Fall 1956 Occupancy

SOUTH SHORE



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This superb new building—in the heart of St. Lambert's established business district—puts you in the very heart of the unprecedented South Shore expansion triggered off by the fabulous St. Lawrence Seaway. For the exciting facts, ask to see the statistical brief compiled by us on this once-in-a-lifetime expansion.

AVAILABLE *For May 1957 Occupancy*

OFFICE SPACE — Up to 6,000 FT. PER FLOOR
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MONTREAL

We shall be glad to discuss these favoured locations with you, without obligation, in the light of your own particular space requirements.

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REgent 7-6571 *or your own real estate broker.*

To know why MACLEAN'S is the one Canadian magazine that consistently interests businessmen READ these four behind-the-scenes articles in the September 29 issue.

POLITICS

Should we yield our rivers to the U.S.?

Here's the background story of the fight for water power on the Columbia and the Yukon, reported by **Bruce Hutchison**, who says it could become the biggest border hassle in our history.

OIL

The big splash hits Manitoba

An on-the-spot report from the newest Canadian boom town: Virden, Manitoba. A complete account of what's happening to the third prairie province to feel the effect of new oil discoveries — as seen from the small town level.

RELIGION

Is cash register evangelism clicking in the churches?

Here are both sides of the story about professional fund raisers who have helped pump sixty million dollars into Canadian churches. How do they operate? Are they effective? What do the churches think? Frank Croft gives the complete story on the Wells Organization and how it woos money from churchgoers.

INDUSTRY

The problem of NOISE

A scientific analysis of noise and its effect on productivity, mental and physical health. Just how rough is noise on man-hours?

National Advertisers Please Note: Just announced is a new circulation rate base of 565,000 for Maclean's, effective with the issue of March 2, 1957. This is an increase of 10.8% over the circulation rate base that came into effect last March and represents a growth in circulation of 33.4% over a period of five years. Advertising rates in March, 1957, will show a reduction in cost per thousand circulation.

MACLEAN'S

Bruce Hutchison writes about:

The Men of Power

By BRUCE HUTCHISON

VICTORIA, B.C.—The American election campaign now hitting its stride and bursting the ultimate sound barrier raises many political questions for the sole decision of our neighbors but the universal, human questions are more puzzling. Above all, why should any man wish to be president of the U. S. or leader of any government for that matter?

What persuades a man to seek the loss of his private life, toil which no union worker would tolerate and all labor laws forbid, the killing burden of responsibility, the cruel and unnatural punishments unknown to the Bill of Rights?

Only a high sense of patriotism could compel any good man to accept the highest office and bad men seldom get the chance in a free country. But there must be much more to it than that. A man must have an overwhelming sense of his own fitness to govern, he must enjoy power over other men, he must love the game of politics, must either feel a compelling mission or suffer from a disordered ego before he ventures where the most fireproof angel would get its wings singed.

Fortunately men of that sort are always available in the democracies or the free world would not be free long.

Every Election Sees Oldest Human Phenomena

We witness in every election one of the oldest human phenomena. A stone-age man, stronger than his fellows, emerges from a cave and becomes a tribal chief. Later on an emperor becomes a god. A mediaeval king is crowned and by his coronation becomes God's appointed instrument on earth. A president or a prime minister rises, no one knows quite how, out of the mass of people and they follow him by consent. Presently they make the man into an institution and finally a legend.

There is nothing new here. The fact of leadership and power changes only in degree and in its method of selection. The mass of free men customarily complains against its leaders but it cries out for leadership and knows that few men can lead.

No man rises to supreme power without a supreme faith in himself. Without an ample supply of egoism (in the strict sense of that word), no man seeks power or can wield power successfully once he has achieved it. The great American presidents must all have been egoists in one fashion or another. Certainly that was true of the greatest in recent times.

Why Roosevelt, Truman Were Great Presidents

The world owes much to the egoism of Franklin Roosevelt, whom I often watched at first hand disguising that massive ego under an actor's charm. His faith in his personal daemon was the mainspring of his genius in politics. Without it he would have remained a mere ornament in higher New York society. It came out of his courage, his illness and his lonely triumph over the flesh. It enabled him to undertake a social revolution which no modest man would have attempted.

In quite another way, less subtle, quite delightful, boyish and innocent, Mr. Truman was a great president and a great egoist. He had an incomparable advantage over his enemies because he knew that he could never be wrong.

Both the current candidates appear to be modest men and, on the personal side, no doubt they are. Neither approaches Roosevelt's theatrical grandeur nor Truman's clinical immunity to error. But both must fail if private doubts are allowed to vitiate public acts. Humility and statecraft seldom mix.

U. S. Election Will Be Contest Of Personalities

Mr. Eisenhower has never pretended to be anything but what he is — an ordinary American without genius or any particular theory of politics trying to do his best. It is his splendid ordinariness, his instinctive reflection of the ordinary virtues, that has made him the most popular president in history. He succeeds because his ordinariness is extraordinary, amounting almost to genius.

Mr. Stevenson is precisely the opposite. He is genuinely extraordinary. It would be difficult to find a less typical American than this scholar and philosopher of politics.

That fact may prove to be his chief liability as a politician. Though the Republic was founded by a club of philosophers, on highly philosophical principles, in modern times only one philosopher of politics, Woodrow Wilson, was elected to the presidency and then by the merest chance of a split Democratic convention and a split Republican party.

The contest between Eisenhower and Stevenson is interesting, to foreigners at any rate, chiefly as a personal contest between two men about as different as men can be — the ordinary man writ large and the extraordinary man trying to appear ordinary but never succeeding. And it is this contest of personalities, we may be sure, and not any contest of policy, that will settle the election. Eisenhower and Stevenson will be remembered long after the party platforms, the policies, the slogans and the vice-presidential candidates are forgotten.

U. S. People's Abiding Faith In Conventions

Looking back on American history, Fortune notes that the political conventions of the past usually saw the trees, seldom the forest. They were debating Wilson's brave new world in 1912 two years before an unimaginable world war; perpetual prosperity in 1928, a year before the crash; the necessity of balancing the budget in 1932, as Roosevelt promised, a year before his era of deficit spending; and the United States' strict neutrality in 1940 a year before Pearl Harbor.

That record of misjudgment is a little discouraging. Yet the success of the original Philadelphia Convention has given the American people an abiding faith in the mystical wisdom of great assemblies, in declarations, platforms, constitutions and legal machinery while we in the British countries have always been sceptical of them, preferring men to programs and actions to abstractions.

Nevertheless, the Americans, for all their devotion to theory, have always been fascinated by personalities. Much more rapidly and enthusiastically than Canadians they make leaders like Eisenhower and Stevenson into folk figures and myths, call them by their first names and thus award them the indefeasible title deeds of power.

Confidence and Modesty Needed For Greatness

To acquire those deeds a man must enjoy power for itself. A philosopher, an artist or a scientist may be great though entirely lacking personal ambition. No statesman can be great without it. He must believe in himself before the people will believe in him. The right combination of inward modesty and outward confidence makes the great man in politics. We have good reason to know that in Canada.

Mackenzie King, for example, was an egoist of towering dimensions in political life and in private a humble pilgrim, appalled by intimations of immortality. R. B. Bennett, the last successful Conservative, succeeded by an unlimited and unquestioning faith in himself. Mr. Meighen missed the great prize mainly, I suspect, because he was too candid in his self-confidence and could not suffer fools gladly.

On the other hand, the only serious disability of Mr. St. Laurent and the main reason for his government's present troubles, seems to be an excessive modesty, an honest doubt about his own omniscience that never troubled his three immediate predecessors. His modest approach to politics, his reluctance to wield power, his impatience with the political game serve well enough in smooth times. In rough, as the recent parliamentary session showed, ambition of the most honorable sort, must be made of sterner stuff.

New Trailer Boosts Beer Truck Carrying Capacity

MONTREAL (Staff)—Thirsty? If so, you may be pleased to learn that **Dow Brewery Ltd.** has come up with an innovation which permits company trucks to carry nearly 18,500 (pint) bottles of beer per trip, almost twice the previous capacity.

The trick lies in attaching a specially built trailer to the regular delivery truck.

To be used in supplying outer-limit Montreal customers, the company estimates that the trailer will save about nine man-hours per day on the runs on which it is used. The saving is accomplished by obviating the necessity of having the truck return many miles through heavy traffic to pick up a second load.

Under the new scheme, both the truck (which holds up to 440 cases of beer) and the trailer (which holds up to 330 cases) will be loaded at the warehouse.

The two are coupled together and the truck and trailer set off on outer Montreal area rounds. First deliveries are made from stock carried in the trailer which, when empty, is detached and parked. The truck continues on the balance of the route and on the way back picks up the empty trailer.

The trailers measure 12 by eight feet and have a weight of 7,900 lb. They were designed by the company's transport department and chassis are being built by **Fruehauf Trailer Co.**, Weston, Ont., with bodies by **Diamond T Motor Trucks (Montreal) Ltd.**

Dow reports a prototype trailer has passed a month-long test in the Montreal area with flying colors. Seven more trailers are on order and deliveries are expected by next spring.

The trailers are equipped with their own air brakes which are coupled to the truck's braking system. A special coupling device permits hooking up and unhooking of the trailer itself to be accomplished in about one minute.

Manitoba Power Cuts For Water Heaters

From Our Own Correspondent

WINNIPEG — With the approaching season of heavy power requirements the Manitoba Power Commission has given notice to customers it will no longer be possible to continue the low flat rate for water heating, unless heaters operate on an "off peak" basis.

This means heaters will be automatically disconnected every day during heavy load periods.

A controller is to be installed on individual water heaters. This will disconnect it for not more than 10% of the time each day. Heaters will then be turned off for 2 hrs. and 24 mins. each day, to be divided into two periods, longest of which will be about 1 hour. 40 mins.

With the controlled water heater service there will be reduced rates. For a 500-watt heater for which the rate for present uncontrolled service is $1.66 a month the new rate will be $1.33. For 750-watt heaters the monthly rate will be reduced from $2.50 to $2; for 1,000 watts, from $3.33 to $2.66; for 1,500 watts from $4.44 to $3.55; and for 2,000 watts from $5.55 to $4.44.

P.A.M.

BUSINESS EXECUTIVES

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PRINCESS ANNE MANOR

so as to enjoy the neighbourhood where their associates live.

- *Adjacent to St. George's Golf and Country Club in Humber Valley Village.*

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35 Old Mill Road, Toronto RO. 7-3141

we'd like to meet your wife

She must be a very interesting person—after all, you picked her as your life partner. No doubt she has ideas about the way she likes things done.

We would like to meet her with you because if we are privileged to serve, you as Executor we will be concerned with her interests.

During our sixty-six years' experience, most of our clients have been women—wives, daughters, and granddaughters of business and professional men who have chosen us to look after the interests of their women folk.

Yes, we would like to meet your wife. Won't you please give us the opportunity?

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Impact Of Monetary Policy Restraint Now Being Felt

How the credit squeeze is leveling off chartered bank assets and liabilities became more easily seen in the banks' July returns to Finance Minister Harris. Signs of a flattening out which had appeared in their June report took more concrete form during July — and early indicators show a continued leveling through August.

The full impact of the past year's monetary policy of restraint is now being felt, bankers say. The leveling of items such as current loans does not indicate any slackening in the demand for money, it is pointed out.

It means that the banks are, by and large, unable to extend credit over and above today's existing high level.

Rapidly growing volume of current loans outstanding has set the pace for the growth of the past year's sharp expansion of credit throughout the economy. And it's a curtailing of this rate of growth that government monetary policy has been aimed at.

In July these loans rose only $1.8 million from the month before. This compares with a May to June increase of $86.7 million; April to May addition of $81.2 million. This indicates that central bank pressure to slow the rise in loans has finally bitten in, say economists familiar with banking trends.

Current loans have leveled off, it seems, just below the $5 billion mark. Loans outstanding at the end of June totaled over $4.9 billion, some $950 million higher than a year earlier. Over the eighteen months of fast-climbing credit extension, loans increased 33% to represent 38.3% of all assets as against 32.1%.

Money was a scarce commodity during July, say bankers. One indication of this can be seen in the banks' selling of their Canadian Government securities. It is understood that during July the central bank held a close rein on money and through open market selling of bonds tightened up the chartered banks' cash position.

Reflecting the tightening, chartered bank treasury bill holdings dropped by $30.2 million in July —after being held for a few months at levels higher than the required 7% of deposit liabilities. And both short term and long term bond portfolios were cut back because of tight cash position and a rise in other assets. During the month short term bond holdings dropped by $46.2 million, long term by $15.4 million.

CONDITION OF CHARTERED BANKS IN CANADA

ASSETS
(In Thousands of Dollars)
Immediately Available Liquid Assets

	July 1956	June 1956	Change	July 1955	Change
Canadian coin	19,417	17,259	+2,158	17,652	+1,765
Gold & coin abroad	1,627	1,549	+78	1,507	+120
Bk. of Can. notes & deposits	804,683	810,043	—5,360	772,015	+32,668
Foreign currency	42,005	38,141	+3,864	37,867	+4,138
Dep. other bks. in Can. curr.	6,975	6,625	+350	3,453	+3,522
Foreign banks	280,258	296,983	—16,725	279,820	+438
Cheques, oth. items in transit	826,543	877,402	—50,859	632,297	+194,246
Govt. Can. treasury bills	741,918	772,199	—30,281	412,067	+329,851
Government Securities:					
Dom. short term	510,604	556,858	—46,254	423,973	+86,631
Dom. long term	1,382,725	1,398,110	—15,385	2,861,902	—1,479,177
Provincial	292,231	291,256	+975	315,827	—23,596
Municipal secs.	201,956	206,048	—4,092	204,948	—2,992
Other secs.	510,897	509,876	+1,021	438,012	+72,885
Secs. other than Canadian	380,343	339,316	+41,027	296,336	+84,007
Mortgages	412,176	393,456	+18,720	161,992	+250,184
Can. call & short loans	293,183	275,194	+17,989	268,952	+24,231
Call & short loans abroad	309,259	299,428	+9,831	187,504	+121,755
Provincial loans	36,012	27,147	+8,865	13,070	+22,942
Municipal loans	150,259	157,284	—7,029	122,366	+27,893
Current loans	4,936,390	4,934,551	+1,839	3,986,371	+950,119
Loans abroad	347,932	341,239	+6,693	326,121	+21,811
Noncurrent loans	1,370	1,387	—17	1,569	—199
Premises	139,708	137,490	+2,218	126,292	+13,416
Loans to corporations	34,741	34,042	—699	33,880	+861
Letters of credit	210,474	216,931	—6,457	179,218	+31,256
Other assets	4,289	4,619	—330	3,471	+818
Total assets	12,877,975	12,944,437	—66,462	12,108,782	+769,193

LIABILITIES

Canadian currency:					
Dep. by Dom. Govt.	278,779	412,965	—134,186	173,611	+105,168
Dep. by Prov. Govt.	143,388	171,756	—28,368	193,761	—50,373
Dep. by other bks.	114,835	117,919	—3,084	139,700	—24,865
Foreign currency:					
Dep. by other banks	182,343	177,403	+4,940	76,786	+105,557
Personal savings	5,923,305	5,881,283	+42,022	5,630,044	+293,261
Notice deposits	472,409	459,437	+12,972	608,425	—136,016
Demand deposits	3,773,123	3,816,515	—43,392	3,593,899	+179,224
Oth. deposits in for. curr.	1,132,817	1,058,320	+74,497	937,602	+195,215
Advances fr. Bk. of Canada	.....	.....	.....	.....	.....
Letters of credit	210,474	216,931	—6,457	179,218	+31,256
Other liabilities	27,306	23,171	+4,135	23,874	+3,432
Capital paid-up	191,786	188,875	+2,911	180,893	+10,893
Rest accounts	418,957	411,409	+7,548	361,956	+57,001
Undivided profits	8,453	8,453	.....	9,013	—560
Total liabilities	12,877,975	12,944,437	—66,462	12,108,782	+769,193

Mortgages rose $18.7 million in the month, about the same increase that has been marked up each month since the beginning of this year though only about half as large as monthly additions made a year earlier. Non-Canadian security holdings rose by $41 million, call and short loans by almost $18 million.

These substantial changes on the asset side of the banks' ledger took place within the limits of a fairly steady asset total. In fact, by the end of July, compared to the end of June, the total was $66.4 million lower.

With little change in assets, liabilities also had to show little change. Deposits by the Canadian Government in the chartered banks declined by $134.2 million. July is usually a time of government outgo, say bankers. Revenues, they point out, are comparatively low at midsummer but expenditures continue steadily, perhaps running even a little higher than usual this year.

Personal savings rose by $42 million during the month, an increase defined as "substantial and expected as part of the usual build-up before spending on government savings bonds in late October and in November."

By month end, demand deposits were running $43.4 million lower than at the end of June. Since such deposits are essentially a reflection of assets — and assets did not increase — this is an expected result of tight money policy, it is pointed out.

The accompanying table shows the condition of the chartered banks at the end of July 1956 with changes from a month earlier and a year earlier.

Knowing when to do which

Some people insist that advertising, to be good, must always be "different."

They feel that the arresting picture, the strange headline, the startling layout will capture more attention from more people. And they're often right.

Other people insist that advertising should always be "conventional."

They feel that a straightforward story, presented with tried and tested advertising techniques, will generate the best results. And they're often right, too.

We believe that a good agency should have the ability and courage to do the unusual. And equally the ability and courage to do the obvious.

Above all, it should have the seasoned judgment to know *when* to do *which*.

YOUNG & RUBICAM, LTD. *Advertising* • Toronto • Montreal • London, Eng. New York • Chicago • Detroit • San Francisco • Los Angeles • Hollywood • Mexico City

MANAGED INVESTMENT

MacNab Concentrates On Quality Stock Investment

MacNab's manager is concentrating on investment in reasonably priced quality stocks. He feels his client need have no fear about the future, despite the relatively high stock market and international problems, as his funds are invested in companies with a good record for dividends and earnings.

MacNab's Manager Says:

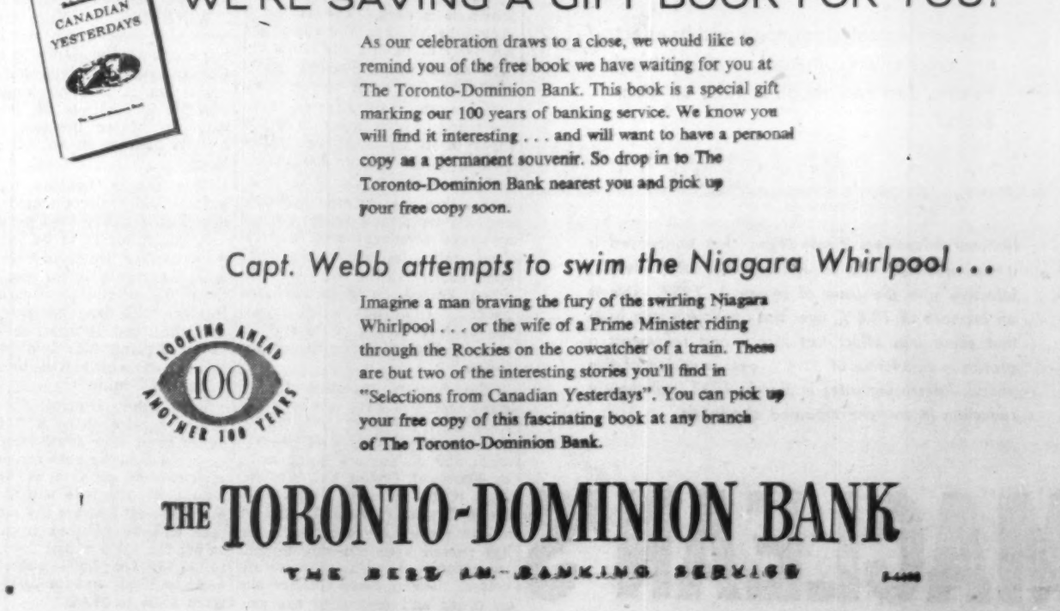
As at August 15 your account had reached a new high valuation of $39,669, being a capital gain of 297% of the original amount of $10,000 handed to me for investment some 11 years ago.

I stress this because it is becoming more difficult to anticipate any further capital gain in your account due to the relatively high stock market and the unsettled international situation, particularly with reference to the Suez Canal, the fact that this is a presidential election year in the U. S. and, furthermore, due to the fact that both the U. S. Federal Reserve Bank and the Bank of Canada are doing everything they can to stop what they consider is a run-away inflation. Whether or not the deflationary forces which have been set in motion by the money-managers can be arrested before a deflationary spiral sets in remains to be seen.

An encouraging factor is that the earnings of large corporations continue to equal or exceed those of 1955 for the first half of the year, with some important exceptions, such as lumber, textiles, chemicals, and a few others. In the meantime, I have been concentrating your securities in growth stocks which appear to be reasonably valued and which pay some sort of a yield. You will note that the average yield in your account is only 3.76%.

I anticipate some sort of reaction after the November election in the U. S. which is bound to influence our Canadian market. According to the best information I can get from personal talks with those in a position to express an opinion, there should not be too much of a reaction one way or another if President Eisenhower is re-elected, but it is impossible to forecast what will happen if there is a Democratic victory, other than the fact that there might be a sharp reaction in the market.

In the meantime, you are holding good securities of companies which have had a long record of dividends and earnings and, if quality counts, you need have no fears about the future, if you are prepared to hold for the long term.


Safety Deposit Box Vault - King & Yonge Sts., Toronto

WE'RE SAVING A GIFT BOOK FOR YOU!

As our celebration draws to a close, we would like to remind you of the free book we have waiting for you at The Toronto-Dominion Bank. This book is a special gift marking our 100 years of banking service. We know you will find it interesting . . . and will want to have a personal copy as a permanent souvenir. So drop in to The Toronto-Dominion Bank nearest you and pick up your free copy soon.

Capt. Webb attempts to swim the Niagara Whirlpool . . .

Imagine a man braving the fury of the swirling Niagara Whirlpool . . . or the wife of a Prime Minister riding through the Rockies on the cowcatcher of a train. These are but two of the interesting stories you'll find in "Selections from Canadian Yesterdays". You can pick up your free copy of this fascinating book at any branch of The Toronto-Dominion Bank.

LOOKING AHEAD 100 ANOTHER 100 YEARS

THE TORONTO-DOMINION BANK
THE BEST IN BANKING SERVICE

LEISHMAN
CANADA'S MOST DISTINGUISHED CLOTHES

Leishman's Mr. Dillmann visits the "Briar Twist" Country

Leishman's "Briar Twist" Suit is in keen demand by Leishman's discriminating customers. On his current trip to the Old Country our chief, Mr. Dillmann, visited the mills which weave this uncommon cloth especially for Leishman. "Briar Twist" is a romantic fabric. From the weather-rough fields of Scotland comes the wool from which local craftsmen spin, dye, weave and finish the cloth in unique colours and patterns. Generations of knowledge enable Leishman tailors to "handle" this rugged, yet light in weight material, into suits of lasting appearance and quality. Note how casually elegant Mr. Dillmann appears in *his* "Briar Twist" Suit.

Tailored-To-Measure or Ready-For-Wear
Leishman Clothes are
sold at important stores from
coast to coast

Wm. H. Leishman & Co. Ltd., Toronto, Canada

McCallum of Oshawa Named Truckers' VP

Frank McCallum of Oshawa has been named Ontario vice-president of Canadian Trucking Associations. His appointment is part of CTA's policy of setting up regional vice-presidencies to handle increased association activity. McCallum is also secretary-treasurer of CTA, is serving a second term as president of Automotive Transport Association of Ontario.

BRITISH COLUMBIA POWER CORP. has issued an additional 180 common shares under exercise of options by certain company officials. Now 3,561,435 common shares outstanding.

White Empress TO Europe
Thrift SEASON FARES
are now in effect! Enjoy a thousand miles of scenic St. Lawrence landscape plus every shipboard luxury aboard White Empresses to Europe. First Class from $230; Tourist from $157 according to ship and season.

SAILINGS:
From MONTREAL to LIVERPOOL

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Oct. 16	Empress of Britain
Oct. 23	Empress of France
Oct. 30	Empress of Scotland
Nov. 6	Empress of Britain
Nov. 13	Empress of France
Nov. 20	Empress of Scotland
Nov. 27	Empress of Britain

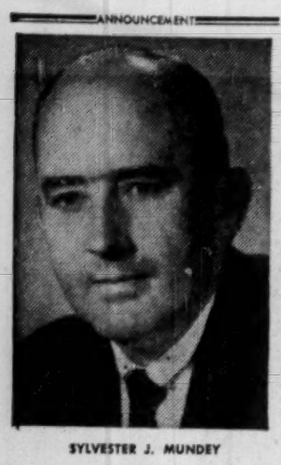
SAILINGS IN TIME FOR CHRISTMAS
From Saint John, N.B., to Liverpool

Dec. 4	Empress of France
Dec. 18	Empress of Britain

Assistance with passports and full information from your local agent or any Canadian Pacific office.

Canadian Pacific

ANNOUNCEMENT



SYLVESTER J. MUNDEY

The appointment of Sylvester J. Mundey as an Advertising Representative in the Montreal office is announced by A. J. Conduit, Advertising Director of The Reader's Digest Association (Canada) Limited. Mr. Mundey has been connected with the automobile industry for many years, and was previously Sales Manager of Doyle Motors Ltd. in Verdun, Quebec. He is well known in Montreal, and has been a member of the Advertising and Sales Executives Club of Montreal since 1952.

Get Engineers The Co-operative Way

Industry Will Work With Education In This College Plan

An educational experiment which may help relieve future shortage of engineers and technicians will be inaugurated soon at Waterloo College, Ont.

Offered are alternate 13-week periods of college and industry, leading to an engineering degree after six years from Grade 12, or a technical diploma after three.

Here's a digest of the announcement by Ira G. Needles, president, B. F. Goodrich Canada Ltd. and chairman of the governors of Waterloo College Associate Faculties:

By IRA G. NEEDLES

We are living in an exciting age of technology with unlimited opportunity for advancement. Within our lifetime, tremendous strides have been taken in the fields of applied science.

The greatest product which we will realize from our electronic era is a better educated race. This applies in all fields — not just the field of science. The days of apprenticeship training are being forced to give way before the merits and advantages of our specialized programs of education.

Today, of all the young people in Canada who are eligible for university, only 7½% are taking advantage of their opportunities. This is double the percentage that it was 10 years ago. College administrators estimate that in another 10 years, there will be again twice as many asking admittance to our universities.

We are facing two major problems.

- To provide the university buildings, equipment and instructors needed to supply the normal increased demand for higher education.
- To direct into the technical field more of our young people who have the ability to procure and make use of a technical education.

The answer to the first of these is money to make possible the needed buildings, equipment, and instructors. Money in increasing amounts from governments, industry and individuals must be forthcoming.

But this expansion of our universities does not provide the complete solution to the vital education problem, especially in the field of technology. The primary purpose of our institutions of higher learning has always been to produce scholars.

Pluggers Needed

But we need more than the gold and silver medallists. We need the pluggers. We need to make it possible for these young people to procure a higher education.

Let me turn your thinking in another direction.

—Changes in the industrial life of our country are changing the ultimate goal of our professionally trained people. They are no longer confining themselves strictly to the technical fields for which they have trained.

—Engineers are becoming sales managers, plant managers, general managers and presidents. They are entering fields where they require a broader education than has been provided for them by our universities.

—Science graduates require an education in the humanities as well. The technical man must be able to report on his work and to understand reports in layman's language.

The Board of Governors of Waterloo College Associate Faculties was originally planned and organized to make possible an expansion of the arts, science and business courses now being offered by the college.

We felt it desirable to explore other fields of opportunity in addition to the proposed expansion of the courses now being offered. This led us to develop and propose a new type of higher education to be offered by this college. We have named it a "Co-operative Plan of Education for Engineers and Technicians."

Warmly Welcomed

This plan has been widely checked with the top management of many of our large companies using engineers and technicians. Their interest in it has been spontaneous, encouraging and sincere.

We propose to admit students who have successfully completed their Grade 12 (Grade 13 is the usual last year of secondary school) in either vocational or high schools. For the next two years the student is given a course that includes the equivalent of the Grade 13 subjects required for university admission, some first-year university subjects and at least 12 hours a week instruction and lab work in technical subjects.

At the end of two years, students who qualify in their academic subjects may then proceed toward a four-year engineer's degree course. Students who fail to qualify in academic subjects but who show definite aptitude toward technical subjects would be encouraged to proceed with third-year course for technicians. Even in the third-year technicians course, students would be given some university credit courses in the humanities.

Reason For Extra Year

This plan requires the student to spent six years after Grade 12 to procure an engineer's degree, rather than the usual five. There are several reasons for the additional year in Waterloo's proposed plan.

One is that industry co-operates with the college in training the student who spends one quarter of a year in college and the next quarter training in industry, alternating quarterly between industry and college for the duration of the course.

Here are others:

—The student will procure more of the humanities than are usually offered.

—The transition to the heavy load of maths and science subjects will be more gradual.

—If the student is unable to meet the high standards of the applied science course he has two alternatives: he may qualify for an arts course or he may complete a technical course and at the same time still have some credits toward a university degree.

A full 12-month operation of the college facilities will be one distinct advantage for the college adopting this program. It will allow the college to educate double the number of students with the same space and equipment. A much greater yearly income will permit the readjustment of compensation for faculty members which would be more in line with salaries of industry.

A full intensive study will be made of the plan before it is adopted although the vast amount of research that has been built into the formulation of the idea indicated that the Waterloo Plan will be highly acceptable.

A Guaranteed SHORT TERM Investment

4% FOR FIVE YEARS

Guaranteed Investment Certificates of the Toronto General Trusts are issued at par in amounts from $100 upwards to run for five years and pay 4%.

Interest is paid half-yearly by cheque.

Repayment of principal on maturity and payment of interest are fully guaranteed by the Corporation. Certificates are a legal investment for trustees.

Endorsed by investors for more than fifty years

For complete details write or telephone

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SELL them...then DIRECT them!

A lady, hearing a radio commercial for a new girdle, decided to buy one. She went to a Corset Shop and asked for it. Unfortunately, they didn't have that brand but they sold her one "just as good".

MORAL: Don't let your commercials sell someone else's goods. Tell your customers "Where to Buy" by referring them to your YELLOW PAGES Trade Mark heading.

Contact the DIRECTORY SALES DEPARTMENT
Toronto — EM. 6-7392
Montreal — HU. 8-2311

THE BELL TELEPHONE COMPANY OF CANADA

Hail Slashes Grain Crop, All Damage at $40 Million

From Our Own Correspondent

WINNIPEG—A mid-September report of the department of agriculture estimates $40 million damage to Manitoba's 1956 crop.

Half of it is loss from hail. The remaining $20 million is because of five weeks of wet and cloudy weather which made harvest work impossible in many parts of the province.

Given four or five weeks' favorable weather the estimate says gross field crop returns could still be well ahead of the $140 million of 1955.

In hail losses it has been the most disastrous year in history of Manitoba agriculture. Most of the damage was caused by a violent storm on Aug. 16 which hit an area which for several years had been practically hail free. Starting near Elkhorn in the west and accompanied by a 70-mile-an-hour wind, it swept southeast 145 miles to Snowflake cutting a swath of destruction averaging 12 miles in width, and at one point spreading to 18 miles.

Crop loss on 1,970 farms in 17 municipalities was practically 100%.

Heavy rain which followed lodged large areas of standing crop along fringes of the hail storm. The total estimated damage is $18 million.

An additional $2 million loss is estimated in other pockets hit by other hail storms, one of exceptional severity on Sept. 12 in the High Bluff area between Portage la Prairie and Winnipeg.

Hail insurance coverage varied from 10% to 80%, the average about 20%. With minor exceptions not more than $10 an acre was carried, most of it on wheat seedings and not on the complete crop acreage.

Some 10% of the whole crop has been ruined by hail. A survey in the area of the August 16 storm showed losses of practically 100% on 210,000 acres of wheat, 150,000 acres of oats, 153,000 acres of barley and 92,000 of flax.

Disastrous August

Even allowing for these losses there might have been a near record crop had it been possible to take it off in good condition. Seeding was about 10 days later than usual. Cutting had just started when the weather broke.

From mid-August on it has been a disastrous season, a repeat of 1951, and one of the worst since 1900.

In the southwest of the province harvesting is about completed. The crop has been taken off in good condition.

Eastward across the southern section of the province crops have been swathed but very little threshed. In central Manitoba and northern crop districts very little is cut. In many fields heavy stands are lodged. Deterioration in grade and yield has caused another $20-million loss. Whether it can be held at this depends on weather conditions next month.

Other crop enemies gave little trouble in 1956. Rust damage was negligible, the smallest for many years. Insect damage was less than usual. In some districts an infestation of grasshoppers was expected but didn't come.

Specialty crops are still to be harvested, sugar beets, sunflower, field peas, rape and some soybeans. All promise good yields but again weather will determine how they turn out.

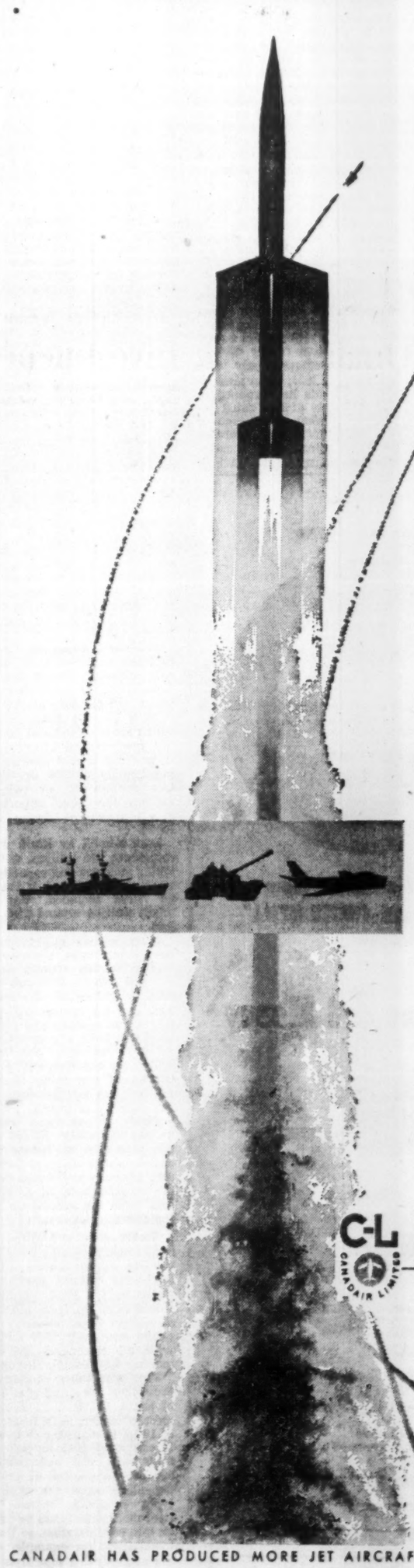
Pile driving in Holland

Irrigating In India

Atlas Copco puts compressed air to work for the world

Pushing back the sea is a full time job in Holland. Aiding the Dutch in their age-old battle are Atlas Copco sheeting drivers now at work sinking piles and sheetings on the vast new Zuider Zee project. On the other side of the globe irrigation schemes in India are bringing new fertility to millions of acres that were once parched and useless. Helping to deliver this life-giving water are Atlas Copco compressors operating air-lift pumps, capable of raising 20,000 gallons per minute. As in India and Holland, so in almost every part of the world, wherever compressed air is working hardest, Atlas Copco compressed air equipment is on the job. Atlas Copco equipment covers every conceivable application of compressed air. Atlas Copco compressed air equipment is manufactured or sold and serviced in 50 countries throughout the world by THE ATLAS COPCO GROUP.

The Atlas Copco Company in Canada is Atlas Copco Canada Ltd. with branches in Truro, Montreal, Toronto, Kirkland Lake, Port Arthur, Edmonton and Vancouver.



FASTER FARTHER HIGHER

The development of guided missiles of every type is becoming one of the most competitive areas in our world today . . . for supremacy in this field can well determine peace for many years. The race is now for greater speed, higher altitude, longer range, more sensitive control.

The strength of Western defence lies to a great extent in the development for the Armed Forces of these new weapons systems suited to the supersonic age. The once deadly cannon, machine gun and rocket are being superseded by complex weapons of great ingenuity.

Canadair has long had a prominent role in Canada's guided missile program, applying the knowledge acquired in years of experience in advanced aircraft systems engineering . . . and Canadair's research, engineering and manufacturing resources are constantly making further important contributions to projects in this field.

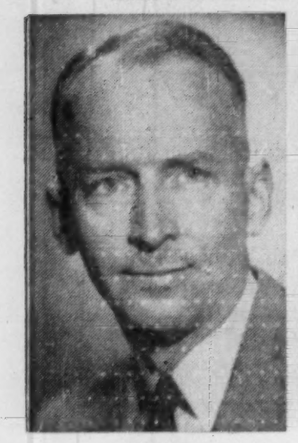
C-L CANADAIR LIMITED

CANADAIR LIMITED, MONTREAL
AIRCRAFT MANUFACTURERS

CANADAIR HAS PRODUCED MORE JET AIRCRAFT THAN ANY OTHER CANADIAN MANUFACTURER

ANNOUNCEMENT

JAMES RICHARDSON AND SONS APPOINTMENTS



L. L. BELL

S. C. STEPHENS

Mr. Ralph D. Baker, General Manager of James Richardson & Sons, Investment Dealers, announces the appointment of Mr. Lawrence L. Bell as General Supervisor of the firm's Bond Department (All Canada), and of Mr. Sydney C. Stephens as Assistant Supervisor, Bond Department (Western).

Mr. Bell has for several years been located in Toronto as Manager of the James Richardson & Sons Bond Department for Canada. He will remain in that city in his new position which he assumes immediately. Mr. Stephens who is currently serving as Manager of the Winnipeg Bond Department, will remain in Winnipeg to supervise the firm's Bond Department operations in Western Canada.

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How Much Can We Afford To Meet Our Steel Needs?

In the past eight years, Canadian steel mills have spent, are spending, some $355 million for expansion.

How much more would be needed to make the steel industry big enough to support Canada's needs? What other factors must be considered?

T. H. McEvoy, vice-president of Dominion Steel & Coal Corp., discussed these questions at the conference last week of the Provincial Governments' Trade & Industry Council. Here is a digest of his speech:

By T. H. McEVOY
Vice-President, Dominion Steel & Coal Corp.

Canada's total steel productive capacity, in terms of ingots, amounts to approximately 5 or 5½ million tons per year at present. As imports are running something in excess of a million tons annually, there is a gap of that size between current production and apparent consumption in this country. If all we had to do, to bridge this gap, were to provide another million tons or so of ingots, the problem would be comparatively uncomplicated, but the solution unfortunately is not quite as simple as all that.

Much of the existing demand, presently being met by imports, is for products not yet consumed in sufficient volume in this country to warrant the installation and maintenance of facilities for their manufacture here. This is especially true when, on account of low tariff levels (there have been no changes in some rates since 1907) or when for other reasons, we are faced, every time there is the slightest recession in business, with keen competition at depressed prices from countries with low wages and low standards of living, or from countries whose costs of production are lower than ours because of the much greater volume which they enjoy through immensely greater population at home.

The threat of competition, to which I have just made reference, is no figment of the imagination but a rather grim, actual and prospective reality as was abundantly shown only two years ago, in 1954, when production in Canada had dropped to approximately 61% of rated capacity and when steel, even in such lowly form as reinforcing bars and common nails, came into this country at prices which Canadian mills could not begin to meet costwise.

Coincidentally, i.e., at the very time that Canadian production had fallen by approximately 40% from capacity and when some of us had to seek business in export markets to keep certain of our mills in operation, a number of European countries and Japan, with low wages and low standards of living, actually increased their production by about 9⅛% and undersold us in our own backyard.

It is not surprising, therefore, if there should be some hesitation about undertaking huge outlays for productive facilities, in advance of actual needs, when there is real danger that existing facilities may be only partially utilized if business falls off or it suits the purposes of the consuming public to obtain their requirements outside of the country, whether because of price or for any other reason.

Cost of New Facilities

What is involved in providing new steel-making facilities today? According to authoritative estimates, the necessary equipment and installation for completely integrated production will cost approximately $300 or $350 per annual ingot ton, in a general way. The outlays required for facilities to produce the main items now being imported from abroad would specifically be approximately as follows: (Figures are actual imports for 1955).

Bars: Imports amount to about 112,000 tons per year; a modern efficient mill would produce about 200,000 tons per annum and the cost complete for such a mill, with the necessary ingot capacity etc., would be about $60 million. This would be an undertaking of considerable magnitude under the most ideal conditions. It becomes more of a problem when one considers that, as recently as two years ago, sufficient business was not obtainable in Canada to keep existing bar mills in operation at capacity. Now, while none of us would like to see the same situation develop again, there can be no positive assurance to the contrary, so this contingency must be taken into consideration in planning for the future.

Structural shapes are currently being imported at a rate of approximately 280,000 tons per annum. It is estimated that about half or more of this tonnage is in wide flange sections which are not produced here.

A modern mill for this class of material would produce approximately 500,000 or 600,000 tons per annum, or twice as much as the annual importation of all structural shapes combined.

Such a mill, by itself, would cost about $75 million, without taking steel-making capacity into consideration and, if the latter were included, the cost might well be around $180 million.

Much as we might like to have it otherwise, the available market in this country at the moment simply does not warrant a venture of this magnitude and the project will possibly not be economically feasible until we have a population of about 25 millions. The United States, for example, with a population of something like 165 millions, has only five mills rolling wide flange beams.

Plate: Importations amount to approximately 132,000 tons per year. An up-to-date plate mill would produce, say 450,000 tons annually and would cost in the neighborhood of $100 million, from the ground up, stating the case conservatively.

Sheets, strip and skelp. Annual importations in these lines run to approximately 216,000 tons. An efficient modern installation for their production would turn out from 750,000 to a million tons annually and would cost easily $300 millions, with all the necessary steel-making facilities for its support.

Pipe and tubes: Imports in these lines are running at a rate of about 160,000 tons annually, most of which is in large sizes of 10 in. in diameter or over. It is estimated that modern pipe mills will cost approximately $60 per annual ton of product, depending upon the sizes and types involved, without any steel-making facilities being taken into consideration, so that an installation, for example, capable of producing pipe from possibly 4-16-in. in diameter and with an annual output in the neighborhood or 200,000 tons, would cost approximately $14 million, if not more, i.e., for the pipe-making facilities alone without any steel-making capacity.

Wire rods and wire products: These items are being imported at present to the tune of about 60,000 tons per year. A new modern rod mill (all wire products start with the rod) would be capable of producing about 200,000 tons per annum and would cost, with the required steel-making facilities, as much as $60 million. Of course, the cost would be much less, if the necessary steel-making facilities already existed, and I should emphasize here that the same thing applies to mills for other products of which I have made mention.

What's Being Done

It will be seen that many problems and huge expenditures are involved. This is not to be interpreted as meaning that nothing is being done by Canadian steel interests to expand production in Canada or to provide new facilities when the same are warranted. As a matter of fact, large expenditures have already been and are still being made in this respect, with more under active consideration, despite all of the handicaps and risks that may exist.

In substantiation of this, let me point out that total steel production in this country increased more in the 15 years from 1940 to 1955 than in the previous 40 years. It is true that this period took in the war years, when expansion would naturally be more rapid, but it is interesting to note that since the end of the war in 1945, steel production has increased by at least 50% in comparison with a population increase of roughly 25%.

In terms of dollars, expenditures for expansion in steel production during the past eight years, including those under way for 1956, total about $335 million—which is not an insignificant amount, even in times like these when people casually refer to millions as if they were little or nothing.

Being more specific, the production of sheets, strip and skelp, for example, from 1946 to 1953 rose from approximately 285,000 tons to over a million tons annually.

In the case of pipe and tubes, a new mill has gone up in Vancouver; another is in the process of erection at Edmonton; a big plant is proceeding at Sault Ste. Marie and extensive facilities for large pipe are also being installed at Welland.

Facilities for producing more rods and bars are now under way, while further develop-

Continued on page 19

ANNOUNCEMENT

TRUST APPOINTMENT

FRED R. COOPER

Toronto General Trusts announces the appointment of Fred R. Cooper as Succession Duty Officer. Prior to such appointment Mr. Cooper was a senior assessor at the Toronto District Office of The Dominion Succession Duty Department. He has had a wide experience with succession duties and in other fields of taxation.

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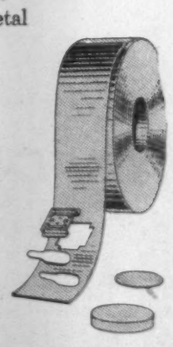

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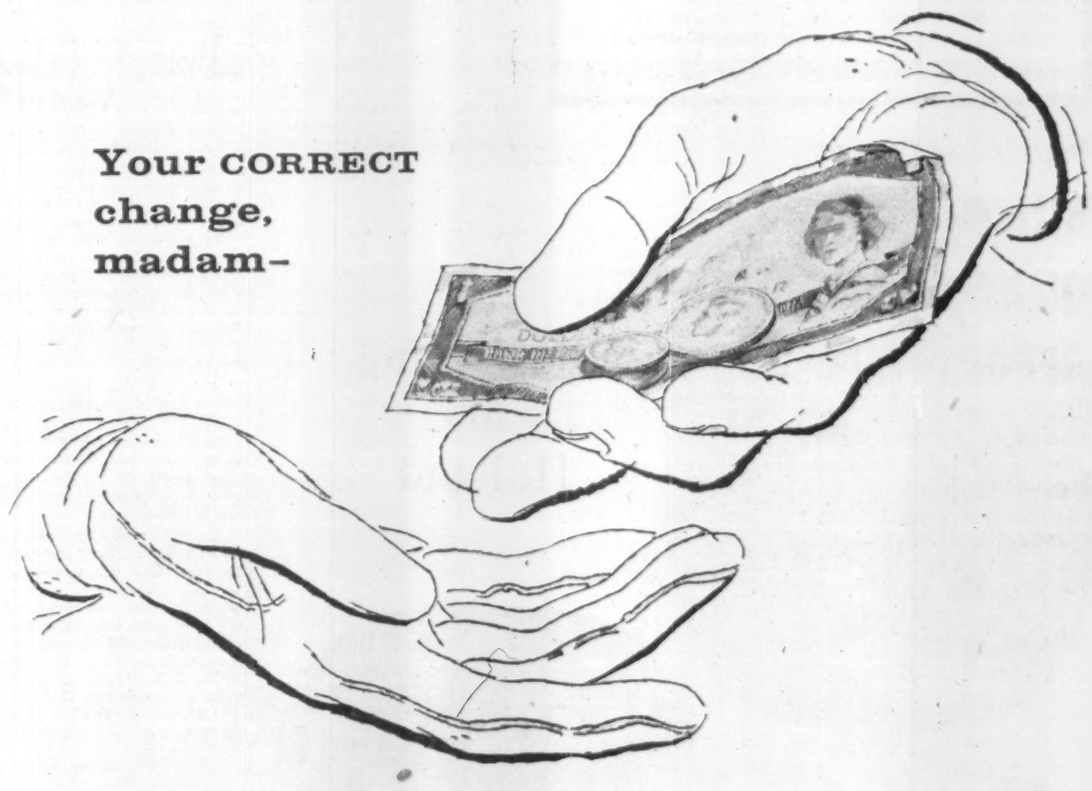

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Boom in Natural Resources Aids Secondary Industries

Booming exports of raw and semi-finished materials will help in the future expansion of Canada's secondary industries, in the opinion of John Dickey, parliamentary assistant to Trade Minister C. D. Howe, speaking to the Provincial Governments' Trade and Industry Council annual conference in Charlottetown. last week.

Here is a digest of his speech:

By JOHN DICKEY

Looking broadly at our current investment program, probably its most striking feature is the increasing emphasis on development in natural resource industries.

Much of the new capacity being created will contribute directly or indirectly to the production of goods destined to move into export channels. Admittedly, this kind of development does not lessen Canada's vulnerability to the exigencies of world markets. On the other hand, one need only look about the world today to appreciate the advantages in Canada's present course of progress.

Almost without exception the more rapidly growing countries of the world are finding their expansion severely handicapped by their inability to earn sufficient foreign funds or attract adequate capital to service their domestic growth. This is true even in the case of countries richly endowed with natural resources.

In this regard Canada is the envy of the world. With growth in export industries comprising the very core of our development, Canada's external financial position remains fundamentally sound. In this way Canada has thus far avoided what has proven to be a fundamental obstacle to growth in many other parts of the world.

Given this strong external financial position, the way is open in Canada to proceed with the many secondary lines of development which can be expected to follow upon the basic expansion now under way. As the production base broadens and as the domestic market grows, there should be an ever expanding range of new products which can be competitively produced in this country. This range can never extend to include every type of fabricated item, for as long as Canada remains a trading nation there will be some products in which other countries will retain a cost advantage. Nevertheless the prospects for further advances are favorable indeed.

Every Province Shares

Another very important feature of this year's investment program is the fact that each of the ten provinces is sharing in the expansion. The extent of the advance does, of course, vary from one province to another. With so much of the increase in this year's outlay taking place in resource industries, it is to be expected that the strongest trends will exist in those provinces most richly endowed with the resources presently in urgent world demand. Nevertheless it appears that no province is without a certain degree of underlying expansionary impetus.

Figures showing this year's capital expenditure intentions by provinces as reported in the early year survey, are available in the report entitled "Supplement to Private and Public Investment in Canada — Outlook 1956 — Regional Estimates." A more detailed examination of what these figures seem to imply in terms of development trends in each province is contained in a report which will be distributed later on to the members of the Conference.

What conclusions can we draw from all this?

(1) The steady rise in exports which has been going on since the middle of 1954 had a great deal to do with the direction that new capital investment is taking at present. Longer-run estimates as to the world demand for Canada's main export commodities also may have contributed to the new swing toward basic materials.

(2) The strength in our export position and in the investment program has resulted in an expanding economy in which most branches of secondary industry have shared. In this connection, one need only look at what the discovery of oil and gas has done for Western Canada. Strength in a couple of basic resource industries has led to the formation of a host of subsidiary servicing industries.

Aid Secondary Industries

There may be a lesson for us here. If, as I think probable, much the same pattern of capital investment occurs in 1957 as is presently under way, our efforts can usefully be devoted to aiding the establishments of those secondary industries which will supplement and service our material producing industries.

Canada, because of the nature and extent of its resources, has a cost advantage over most other countries in producing a wide variety of raw and semi-finished materials. As our population and techniques have grown, we have constantly increased our own domestic processing activities. More and more of this will be done in the years ahead, but undue forcing of this trend for those industries in which other countries have a cost advantage over us may only lead to a lower standard of living for all Canadians than we could otherwise enjoy.

During recent months we have all heard a great deal about the long-term expansion possibilities of the Canadian economy. Now these forecasts regarding the future are, to some extent, obtained from trends which have prevailed in the past. Many Canadian industries have made progress in the past largely, I think, because of close attention to day-to-day operations, by carefully watching their short-term cost and income positions, and by constantly seeking improvements in operating methods or in end products.

If we continue to do this, I feel confident that in future decades as in the past, our actual advance will, in many lines, far surpass present day expectations.

ANNOUNCEMENT

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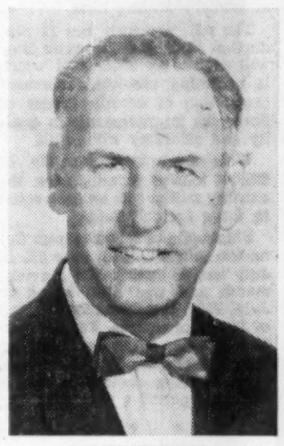

ARTHUR BLAIR

Dr. R. G. Hare, President of the Abstainers' Insurance Company, has announced the appointment of Arthur Blair as General Manager. Mr. Blair has spent over twenty years in the general insurance field. Incorporated and licensed to operate in the Province of Ontario with Head Office at Simcoe, the company will write auto insurance for abstainers only. Present plans are to issue the company's first policies on October 1st.

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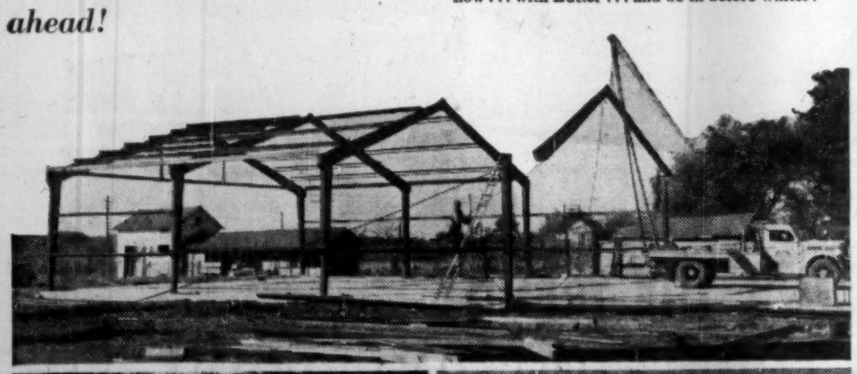

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How Much Can We Pay For Steel Needs?

(Continued from page 18)

ments, both in these and other lines, will follow in due course.

Great things have already been accomplished and more are in prospect with a view to making this country as self-sufficient as possible in the matter of steel supply. But, if growth in this respect is to be as rapid as we would have it and if the trend toward expansion is to reach its full momentum, there must be a favorable and healthy climate here for industrial development.

The mere mention of this need brings three things immediately to mind as being beneficial:

(1) **Purchasing** as much as possible in Canada, thus assuring volume and continuity of demand in the home market;

(2) **Having a tariff policy** which affords adequate safeguards and which is sufficiently flexible to meet the exigencies of the times as they may arise and change;

(3) **Taking effective measures** to alleviate transportation costs so that goods may reach into the farthest corners of the land at reasonable prices.

Famous Players Net Slips 8%

Famous Players Canadian Corp., Toronto, consolidated net profit for the 26 weeks ended June 30, 1956 (unaudited) slipped 8.2% to $1,321,106 ($1,438,793 a year earlier), equal to 78c (82c) per share. Profit includes $231,901 ($94,500) on sale of government bonds and capital assets.

Improved business in key theatres and larger suburban ones reflect streamlining of company's operations, reduction of amusement taxes in some provinces, policy changes to accommodate important new films and near saturation point of Canadian TV sales, says President J. J. Fitzgibbons.

26 Weeks Ended	June 30 1956 $	July 2 1955 $
Earnings after all charges (incl. depr.)	1,971,206	2,434,293
Less: Income taxes	882,000	1,090,000
Add: Profits from sale of govt. bonds & capital assets	231,901	94,500
Net profits	1,321,106	1,438,793
Earnings per share	0.76	0.82

Book Tells Story Saskatchewan Oil

"Oil in Saskatchewan," a new booklet giving a general picture of the story of oil from origin to end product, is available without charge from the Saskatchewan Department of Mineral Resources. The 72-page booklet is well illustrated with photographs, drawings and charts, and is designed for the layman and for use in schools.

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"Bakelite" moulding materials for automobile distributor caps and rotors have excellent electrical properties as well as resistance to grease, heat, moisture and acids. Parts produced by Thermoset Plastics Limited for a large manufacturer of automotive accessories located in Southern Ontario.

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Growth

Manufacturing plants new to Canada, expansions of existing industry across the nation

Areas, industries are invited to report their progress in this column.

Aviation Take-Over

For those who fear there is too much foreign control of Canadian industry, current news from the West should provide a degree of re-assurance.

A recent item was that a group of Prairie businessmen had invaded the commercial building boom in Edmonton and was investing multi-million dollar funds in that field—a particular target for foreign funds. This week, the news is from British Columbia where two West Vancouverites have taken over an important company in our burgeoning aviation industry.

The B.C. transaction involves **B.C. Airlines Ltd.**—a charter firm working closely with development of the provincial basic resources of logging, mining and fishing. It has been bought from William B. Sylvester and associates of Victoria, B.C., by F. Maurice McGregor and Paul Tak. McGregor, now president of the company, has been in the aviation industry in Canada and abroad for more than 28 years as pilot and executive. Tak, who is the new vice-president, is a Canadian citizen who came from the Netherlands nine years ago.

And this is how they are planning future development of the firm: "Operation will be geared to the development of natural resources of B.C. We are already planning expansion of equipment and facilities, and will place orders for additional aircraft."

B.C. Airlines presently has a fleet of 24 Beaver and Cessna float planes operating along the coast and into the interior. The company has bases at Vancouver, Victoria, Nanaimo, Campbell River, Port Hardy, Alert Bay, and Aliford Bay in Queen Charlotte Islands.

The company's HQ will move from Victoria to Vancouver where a new administration building and passenger terminal adjacent to the Fraser River at the south side of the International Airport is now under construction.

Asbestos Looks Ahead

Keeping Canada's asbestos mining and processing industry up-to-date and fully competitive is of major concern to the operating companies.

Latest step in the fight to hold and expand markets is that of **Canadian Johns-Manville Co.** and its U.S. parent, **Johns-Manville Corp.**, who have approved plans for the immediate enlargement of their new fibre mill at Asbestos, Que.

When completed last spring, the mill was the largest in Canada in terms of floor space. The extension will add 75,000 sq. ft. of milling floor space as well as provide equipment for four additional primary milling lines.

The mill presently has 12 production lines and the extra four will replace an older mill which is becoming obsolete. Increased production of certain grades of fibre plus improvements in quality and efficiency will result.

With an annual capacity of 625,000 tons of asbestos fibre, the existing mill covers an area equal to three football fields.

Shipments of asbestos from Canadian mines was up over 8% in July last as against the previous month and was 3.7% ahead of July, 1955, the Dominion Bureau of Statistics reports. For the year to date, shipments were down less than 1% and exports of asbestos were running about 2% behind the same period a year ago.

* * *

Metals for Industry

The growth pace of industry generally is probably best demonstrated by the efforts of suppliers to keep pace with demand.

An example of this is the race by **Federated Metals of Canada Ltd.** to keep abreast of markets. Last week, the company celebrated the official opening of its new non-ferrous metals smelter and plant in Metropolitan Toronto. Meantime, it is rushing completion of a second non-ferrous metal fabrication, processing and refining plant in Montreal. Offices and warehouse facilities have been established in Winnipeg to service western Canada.

The Ontario plant, located in Scarborough on an 18-acre site, covers about 40,000 sq. ft. The Montreal plant, for which a provisional formal opening date has been set for later this year, is on a 9-acre site in Lachine.

The plants will produce and distribute specialized products like solder, grid metals, antiminial leads, type metals, babbitt metals and zinc die casting alloys. Extras at Montreal will include fabrication of lead sheets, pipes, and bends as well as a lead construction department.

The new facilities will handle and process practically every type of non-ferrous scrap available in this country.

* * *

Dollars In The Air

In the face of rising labor costs, one of the biggest questions in industry now is operating efficiency. Therefore, the installation of electronic temperature control equipment which it is claimed, will save thousands of dollars annually in the operation of the new CNR Queen Elizabeth Hotel in Montreal should be of special interest.

The equipment, called the supervisory data centre, collects key operating data of an air conditioning system in a central location and supervises the system's operation by remote control. It is designed to reduce the cost of operating an air conditioning system and to improve performance.

Minneapolis-Honeywell Regulator Co., whose temperature sensing devices are incorporated in the installation, state that it allows the consolidation of 200 check points in the hotel into one location. An operator at a single control panel can check and adjust temperatures in different parts of the hotel by remote control. By moving a knob, he can maintain temperatures at comfortable levels as banquet halls and other public rooms become crowded.

The Queen Elizabeth will be the first hotel in the world to install this particular equipment.

* * *

Lower List Prices?

Another example of how efficiency is the keyword in industry comes from **Canadian Admiral Corp.** which has its headquarters in Port Credit, Ont.

The firm has formed a range production division, marking an important development in the growth of Canadian Admiral and in its efforts to expand markets. Production of Admiral ranges is expected to bring these two results:

—Produce savings that can be passed on to dealers and consumers through lower list prices.

—Make individual models available sooner after introduction to keep pace with increasing demand.

Manager of the new division is former field engineer William E. McLean, who joined the company three years ago and had previously been with Rogers Majestic Corp., Ontario Hydro and Addison Industries.

* * *

To Speed Production

About one and a third acres of floor space will be provided by the new single-story plant of **Spear & Jackson Ltd.** which is expected to be completed in Burnaby, B.C., before the end of this year.

Spear & Jackson, manufacturers of saws for the lumber and pulp and paper industries, have a plant on Granville Island at present. Erection of steel on the new plant is scheduled for early September, structural work will be completed in November, and machinery from the Granville Island location moved in immediately after.

The company has acquired a six-acre tract for future expansion.

Plans for the new plant include continuous production flow lines to speed up production and increase capacity.

They'll Roll Out The Welcome Mat For Canadian Businessmen

Some 80 British firms have indicated that they would be pleased to welcome Canadian business visitors and show them around their plants, the British Trade Centre reports. The arrangement was made through the Dollar Sterling Trade Council.

The firms which manufacture a wide range of products, constitute a good cross-section of British industry.

Here is the list:

Agricultural Machinery. Ransomes & Rapier Ltd., Ipswich; Ransomes, Sims & Jeffries, Ipswich; Rotary Hoes Ltd., West Horndon, Essex; R. A. Lister & Co., Dursley.

Automobiles. Rootes Group, Coventry (London showrooms — Devonshire House, Piccadilly); British Motor Export Corp. and Austin Motor Export Corp., Longbridge and Cowley (Sales department — 479 Oxford St., W. 1); Leyland Motors Ltd., Leyland, Lancs.; A. E. C. Ltd., Southall, Middx.; Jaguar Cars Ltd., Coventry (London showrooms — 86 Piccadilly, W. 1); Rolls-Royce Ltd., Derby (London showrooms — Conduit St., W. 1).

Bearings. Hoffman Mfg. Co., Chelmsford; Ransome & Marles Ltd., Newark.

Biscuit Manufacturers. Carr & Co., Carlisle; Huntley & Palmers Ltd., Reading; Peek Frean & Co., London.

Brewers. Guinness Son & Co., London.

Carpets. Crossley & Sons Ltd., Halifax; Templetons Ltd., Glasgow; Carpet Trades Ltd., Kidderminster; Wilton Royal Carpet Factory Ltd., Salisbury.

Chemicals. Boake Roberts & Co., London.

China. Doulton & Co., Stoke-on-Trent, London; Josiah Wedgwood & Sons Ltd., Stoke-on-Trent; Crown Derby Co. Ltd., Derby.

Cutlery. Sippel Ltd., Sheffield; Trustwell Bros. Ltd., Sheffield; Ibberson & Co. Ltd., Sheffield; Kent & Co., Sheffield; Sheffield Lighter Trades Employers' Assn., Sheffield.

Bicycles. Raleigh Cycle Co., Nottingham; Enfield Cycle Co., Redditch.

Electrical. English Electric Co., Stafford; General Electric Co., Rugby; Ferranti Ltd., Hollinwood, Lancs.; B.T.H. Ltd., Rugby.

Engineering. Ruston & Hornsby Ltd., Lincoln; Babcock & Wilcox Ltd., Renfrew; Mirrlees Watson & Co., Glasgow; R. A. Lister & Co., Dursley; Rubery Owen & Co., Darlaston; Renold Chains Ltd., Manchester; Henry Simon Ltd., Stockport; Glenfield & Kennedy Ltd. (hydraulic), Kilmarnock; Holman Bros. Ltd., (mining), Camborne, Cornwall.

Foodstuffs, Confectionery. J. Lyons & Co., London; Cadbury Bros. Ltd., Bournville; Frys Ltd., Bristol.

Fertilizers. Fisons Ltd., Felixstowe.

Generators, Turbines. C. A. Parsons & Co., Newcastle-on-Tyne.

Fishing Tackle. Hardy Bros. Ltd., Alnwick.

Footwear. Upsons Ltd., London, and Kettering.

Lace. Simon May & Co., Nottingham.

Linen. William Ewart & Son Ltd., Belfast; Ulster Weaving Co., Belfast; Blackstaff Flax Spinning & Weaving Co., Belfast; William Liddell & Co., Belfast; York Street Flax Spinning Co., Belfast; Berkshire Knitting Co., Ulster.

Machine Tools. Associated British Machine Tool Makers, London.

Motor Accessories. Joseph Lucas Ltd., Birmingham; Smiths Motor Accessories Ltd., Cricklewood.

Motorcycles. Triumph Engineering Co., Coventry.

Plastics. Bakelite Ltd., Birmingham.

Pumps. Broom & Wade Ltd., High Wycombe; Mather & Platt Ltd. High Wycombe.

Radar & Radio. English Electric Co., Stafford; Pye Ltd., Cambridge.

Rubber Manufactures. Dunlop Rubber Co., Birmingham; North British Rubber Co., Edinburgh.

Steel. Steel Co. of Wales Ltd., Port Talbot; Pressed Steel Co., Cowley. Oxford.

Textiles. William Hollins & Co., Nottingham; Tootal Broadhurst Lee & Co., Manchester; Calico Printers Assn., Manchester.

Toys. Lines Bros. Ltd., Merton, London.

Woollens & Worsteds. Hunt & Winterbotham, Dursley; in addition, Hawick Chamber of Commerce will be glad to arrange visits to local manufacturers.

Whisky. Scotch Whisky Assn., Edinburgh.

Optical Equipment & Measuring Instruments. Taylor, Taylor & Hobson Ltd., Leicester.

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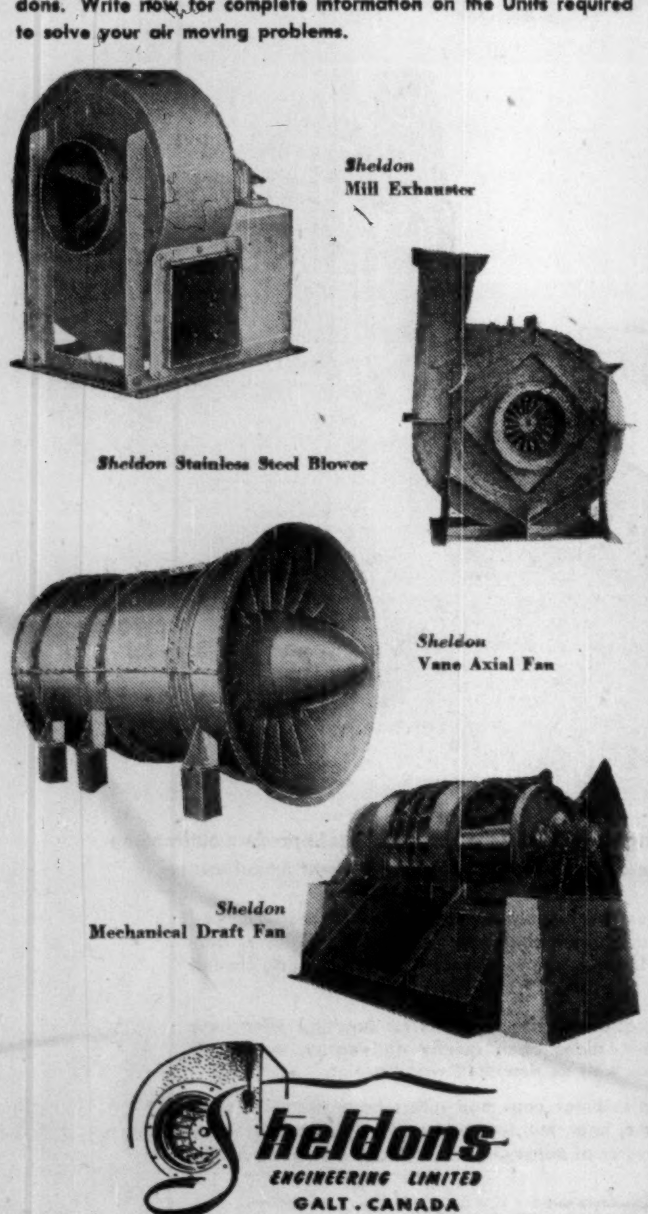

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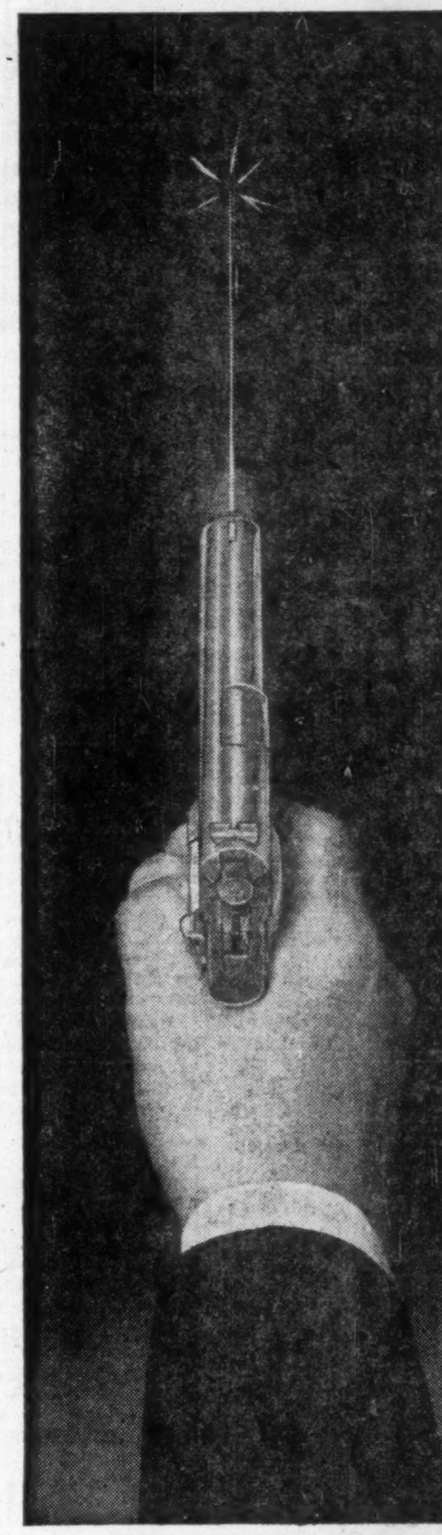

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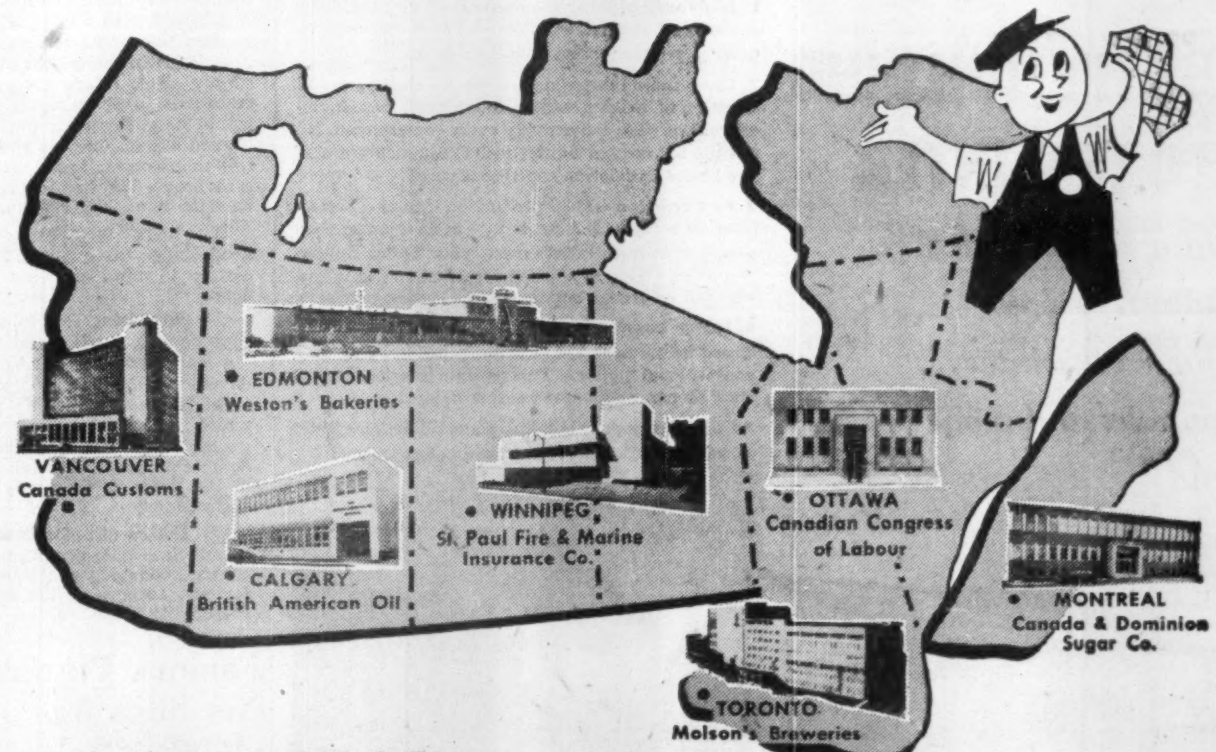

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Flour Millers Fear Drop In Exports Again This Year

Increasing price competition from subsidized U. S. exports is clouding the outlook for Canadian flour millers, industry sources say.

In the crop year just ended, overseas sales of Canadian wheat flour fell to the lowest point since 1939-40, and there are few signs of improvement.

Hardest hit have been sales to the U. K., says a milling executive. Canada supplied less than 10% of last year's British wheat flour consumption, and British purchases from Canadian millers are expected to be even lower in the current crop year which began Aug. 1. Both U. S. and local British competition are cutting into Canadian business.

Demand remains firm in the Philippines, South America and other overseas markets which favor high-protein, hard-spring flour. Prices for wheat flour in these markets, as in Canada, are expected to remain firm during the current crop year.

Growing consumer acceptance of "ready mix" baking preparations will help boost domestic sales of wheat flour, it is predicted, although competition among Canadian and U. S. brands shows no sign of diminishing.

In the year ended July 31, Canada exported 16,898,583 cwt. of wheat flour, out of total production of 40,158,888 cwt. In 1954-55, exports were 17,692,945 cwt., production 40,606,599.

Canadian mills took 91,794,533 bu. of wheat to be milled in the 1955-56 crop year, down from 92,406,768 bu. the previous year. This was the smallest total since 1949-50.

Here is a summary of Canadian wheat flour production and exports:

Crop year	Wheat milled for flour (000 bu.)	Wheat flour produced (000 cwt.)	Wheat flour exported (000 cwt.)
1930-31	71,380	31,297	13,331
1935-36	67,773	29,246	9,759
1940-41	87,819	38,369	20,166
1945-46	118,075	52,018	28,362
1950-51	106,748	46,315	24,357
1951-52	104,494	44,771	22,258
1952-53	106,727	46,777	24,609
1953-54	91,855	40,770	20,143
1954-55	92,407	40,607	17,693
1955-56	91,795	40,159	16,899

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POSITIONS WANTED

BUSINESSMAN, aged 43, formerly in the textile and lumber businesses, living near Huntsville, Ontario, would be interested in agencies or other business that could be handled from this location. Maintains small, permanent office in town and has private financial means. Box 987, The Financial Post, Toronto.

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REQUIRED: QUALITY LINES—Province of Alberta. Calgary Firm, Manufacturers Agent and Distributor will give genuine representation to suitable lines. Replies treated confidentially. Box 995, The Financial Post, Toronto.

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REQUIRES SERVICES two experienced men — one for Customs Tariff matters and one for Estate Tax problems. Legal training preferred. Please reply outlining experience and remuneration expected to Box 997, The Financial Post, Toronto.

Polymer Plans To Remove Allocations

Unless some unforeseen development arises over next couple of weeks, **Polymer Corp.**, Canada's Crown-owned synthetic rubber producer, plans to cease its allocation system of marketing rubber for the last quarter of 1956.

Polymer continues to operate at virtual capacity, with output expected to reach a new peak of 115,000 tons this year, a 10% boost over 1955, which was itself a record year. A big factor in the future domestic marketing outlook will be the public acceptance of the new 1957 auto models now starting to come off the assembly lines. Auto demand has remained at near peak levels this year in Canada despite a decline in U. S. The auto tire has been one of the most buoyant outlets for synthetic rubber in the last few years.

The Financial Post is informed that company's export demand continues to hold at high levels, with ot tlook for a continuation of this trend into 1957.

Currently Polymer shipments are going 60% to export markets, 40% to domestic customers. Although company officials are fully prepared for sharply stepped up competition in its overseas markets from U. S. companies, they are counting on their 10-year record in this market, plus their high standard of research, to maintain their strong export position.

Polymer officials have decided to get back into the high solids latex market and see a potential 500,000-lb.-a-year market in Canada. A major outlet for this specialty latex product is the manufacture of automobile seats. This has been a fast-growing market in recent years.

Polymer has been licensed by the **B. F. Goodrich Co.** to use a new process which manufactures an improved, high-solids-content latex more quickly than by other methods.

New $15 Million Plan

Meantime, company officials continue to carry on negotiations towards establishment of a butadiene plant in Western Canada. Big factor in final decision to go ahead with the $15 million plant is ability to conclude satisfactory long-term purchase deals with gas producers for butane supplies from their "wet" gas fields.

Plans are to process the butanes into butadiene — an all-important raw material in the synthetic rubber process — and transport this by rail to the Sarnia Works where it would be processed into synthetic rubber.

How To Start, Run Business Is New Course

A new research program into the basic problems of creating and administering a business will be started this fall by the School of Business Administration, University of Western Ontario, London, Ont.

Prof. J. C. Taylor, CA, will be relieved of teaching duties to devote full time to the problem of capital expenditures and depreciations.

Other research projects under ay at the school include:

—Canadian corporation financing 1946-53: a study of the extent to which large Canadian companies relied on funds from current operations and other sources to meet operating and expansion demands.

—The 25 largest Canadian companies 1946-56: a statistical summary of increases in size and changes in position which have occurred in the 25 companies during the postwar period.

—Why U. S. companies outsell Canadian: a summary of views expressed by members of the school's annual Executive Opinion Poll on the usefulness of organization charts in their companies.

—Consensus of optimism: a summary of results of 1956 predictions obtained through the Executive Opinion Poll.

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OPENING WITH NON-PARTISAN NATIONAL ORGANIZATION: working with public officials and community groups; serving as municipal consultants; analysing and reporting on diversified range of governmental problems.

QUALIFICATIONS: university training, research experience, pleasing personality.

STARTING SALARY: from $5,000 to $6,000, depending on qualifications.

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3. Age 35 to 42.

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Established 1936

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for challenging executive or sales opportunity. Top executive producer, in organization, sales merchandising.

Box 996, The Financial Post, Toronto

CIVIL ENGINEER AVAILABLE

for administrative position. 12 years experience in all phases of Civil Eng. including heavy construction. Eng. bookkeeping and accounting; also sales and promotion. Reply

Box 998, The Financial Post, Toronto

GRADUATE ENGINEER AVAILABLE

Diversified experience includes plant administration, organisation, layout, production control, industrial relations, method studies, costing, project engineering, some sales. Age: mid-forties. Seeks production, plant engineering or sales opening. Quebec or Ontario.

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SENIOR ASSISTANT ENGINEER

Excellent Opportunities:

Bilingual and experienced engineer required for construction of petroleum installations and service stations.

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Applicants must possess a good scholastic background, preferably an M.A. in Economics or Business Administration. They must also have had some practical experience in the field of statistics. Some previous industrial engineering, personnel or labour relations experience is a very desirable, though not essential, qualification.

Applications will be treated in the strictest confidence. They should give particulars of applicant's previous experience, academic background and salary expected and be sent to:

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ALUMINUM COMPANY OF CANADA, LIMITED,
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ANODIZING

Young man with sales ability and some executive capacity, age 30-40 yrs., by established company starting anodizing division — must have ability and desire to progress with growing concern. State particulars fully as to age, experience and previous earnings.

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If you are currently employed as an advertising assistant for a large manufacturer or as advertising manager for a smaller industrial concern, this opening should interest you. You can widen your scope and increase your earning ability if you are the right man for the job. Drop us a line briefly outlining your qualifications to

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37 years old, diversified experience, highest references. Recently employed abroad, now returned to Canada. Will be in Toronto from October 1st for interviews.

Box 980, The Financial Post, Toronto or phone LEnnox 5-9019

SALES MANAGEMENT ENGINEER

seeks responsible executive position

Engineering graduate, member of Professional Associations, young family man with 14 years in construction and building materials field. Currently Sales Manager of large-volume Company operating from Central to Eastern Canada. Seeking similar position but one with more promise in smaller organization that offers advancement to a man with executive training and professional background. Write directly to advertiser,

BOX 982, THE FINANCIAL POST, TORONTO

PURCHASING AGENTS

A manufacturer of electronic equipment in the Montreal area requires someone to handle all phases of their purchasing. Applicant should be a live-wire and able to accomplish things in a business-like manner. Previous experience and full knowledge of electronic components are essential. Usual employee benefits include 5-day week, group insurance, etc. Salary open for discussion. Reply in confidence to

BOX 985, THE FINANCIAL POST, TORONTO

New Car Sales Boost Likely Result of New-Model Lure

News from the auto world this week bulged with hopes and plans for the future:

—**U. S.** industry planners were looking for sales of the much-changed 1957 models to be second only to those of 1955. Canadian auto makers still plan on selling close to 400,000 new cars this year, still more in 1957.

—Canadian motor vehicle production rose to 350,000 so far this year, about 5,000 below the same time a year ago. Sales were up an unofficial 5% over record 1955. First 1957 models came off **Ford** production lines at Oakville, Ont., last week.

—**Studebaker-Packard Corp.** in the U. S. was working on $250-million plans to get itself back on a money-making basis, following its recent alliance with **Curtiss-Wright Corp.** This was good news for **Studebaker-Packard of Canada,** which — it's known — has done better than the parent.

—**General Motors** predicted two-tone color combinations will gain more popularity in the new model year.

—**Willys of Canada** announced a first-half boost in vehicle sales of 27.5%, with equipment sales up 89% and parts 10% higher. The average: 42% above last year's first half.

—**White Motor of Canada,** announced introduction of new lightweight models using aluminum extensively. White has been another big sales gainer.

Scurry-Rainbow Sets Output Record Holds More Land

Record production and a cash operating profit of $536,052 before depletion and amortization is reported by **Scurry-Rainbow Oil Ltd.** for the nine months ended June 30, 1956. In the first nine months of the previous fiscal year, operating profit was $451,611.

The company report comments that annual rate of earnings now is about $700,000 with a potential $300,000 net profit after all charges.

Scurry-Rainbow now has gross acreage holdings of about 3 million acres with net acreage position at a high of 893,347.

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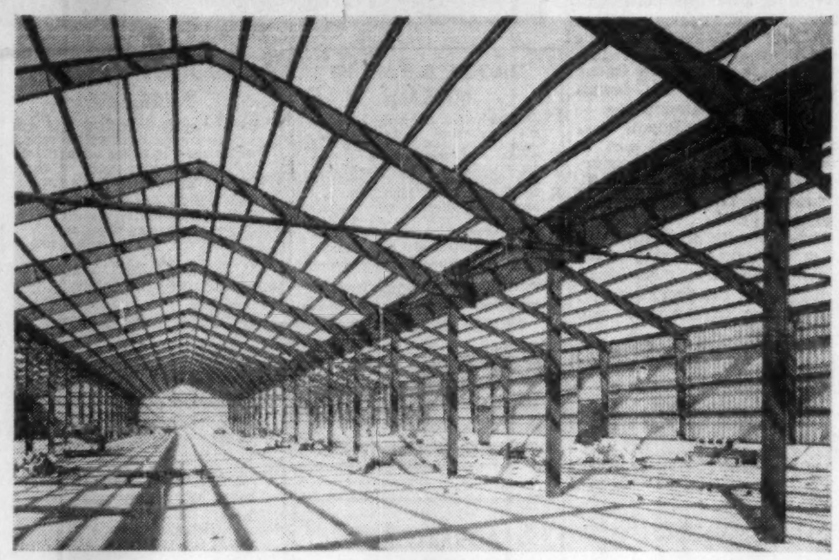

FIRST THE FRAMEWORK: Precut, predrilled steel framework of an industrial plant is bolted together on the plant site in the first stage of a new "pre-engineered" building process, introduced in Canada by Butler Manufacturing Co. (Canada).

THEN THE CLADDING: Standard-size steel or aluminum panels, also predrilled, are then bolted to the framework to form roof and walls.

New Plant Makes Factories, Tailor-Fit or Off-the-Rack

By CLIFFORD FOWKE

Two "pre-engineered" factory buildings with steel structurals and aluminum walls and roofs began a long journey in rail cars through Canada last week — one to be erected in Edmonton to house a brick plant, and the other headed for Mahone Bay, N.S., for a boat-building company.

They were among the first major products to be shipped from a new enterprise in Ontario — the **Butler Manufacturing Co. (Canada)** plant at Burlington, alongside the Queen Elizabeth Highway.

The plant — first manufacturing unit in Canada of the U. S.-based **Butler Manufacturing Co.**— started operations about four months ago. But in that short period, it has already scored an outstanding success. Here is the record of progress:

- Output has jumped from $28,000 in value in June to nearly $250,000 in August, and is expected to hit the $300,000 level this month.
- It is consuming about 400 tons of steel monthly from Canadian mills.
- It is providing steady employment for an increasing labor force, with order books already well filled through a country-wide dealership system and with plans for stockpiling standard units during the winter.
- The 95,000-sq.-ft. plant which is also a Butler steel building, is presently equipped to produce buildings with single spans of up to 70 ft., but plans are already under consideration to increase capacity so that buildings with up to 100 ft. single spans can be made.

Five Major Lines

The company has five major product lines but work in the Burlington plant meantime is concentrated on pre-engineered buildings for a variety of uses in industry, commerce and communities. Precision methods and processes are used in their fabrication, and the new plant has one of the most modern flow coating paint installations in Canada.

Rigid frames, wall and roof panels and other parts, using either steel or aluminum, are die-formed and precision-punched to bolt together on the erection site. It's claimed that these engineering and manufacturing operations eliminate much of the planning and construction time involved with conventional buildings.

Last week, Ontario Minister of Labor Charles Daley was the principal guest at the formal opening of the plant, and an assurance was given by President Oscar D. Nelson of Butler Manufacturing Co., Kansas City, that the enterprise was an independent Canadian operation which he expected to grow substantially.

The Butler organization has six plants in the U. S. and has an annual total sales volume of about $75 million.

On the order books of the Burlington factory, at present, is a long list of industrial and other customers covering almost every part of Canada.

The units which left last week in four rail cars for Edmonton were made to the order of **Western Tractor & Equipment Co.** and will provide 54,000 sq. ft. of new factory space in that city. The others sent to Nova Scotia were to the order of **Shipping Industries Ltd.** and represented about 63,000 sq. ft. of factory space. Those two orders alone were worth some $160,000.

Three Shop Hubs To Serve Gagetown

From Our Own Correspondent

FREDERICTON — A St. John firm, **Franklin Service Co.,** has been awarded a contract to construct a neighborhood shopping centre at nearby Oromocto for army personnel stationed at Camp Gagetown.

Work on the centre, which will serve approximately 700 of the camp's proposed 2,500 homes, will get under way immediately. Is expected to be completed by May next year.

Plans call for a supermarket, laundry, drug store, restaurant, barber shop and beauty salon. The centre will be one of three in the area, and the largest. It will serve houses already completed and others provided over the next two years.

Copper-Gold Values Obtained By Bateman Bay

A 16.8-ft. intersection averaging 2.239% copper, 0.217 oz. gold and 0.461 oz. silver has been cut at 246.2 to 263 ft. in hole No. 53 on the A zone of **Bateman Bay Mining Co.,** officials report.

Higher in the hole, at 38.9 ft. to 43 ft., a 4.1-ft. section assayed 0.871% copper, 0.118 oz. gold and 0.145 oz. silver.

Results of four other holes were: No. 34, 22.4 ft. averaging 2.655% copper, 0.029 oz. gold and 0.393 oz. silver; No. 46, 24.5 ft. running 0.525% copper, 0.011 oz. gold, 0.311 oz. silver and 1.089% zinc; No. 36, 7 ft. of 0.9% copper, 0.069 oz. gold and 0.473 oz. silver; and hole No. 38, 8.6 ft. averaging 1.34% copper, 0.029 oz. gold, 0.607 oz. silver and 5.49% zinc.

The first intersection in hole No. 53 cut shoot No. 6 and the deeper intersection, shoot No. 2, in the "A" Zone which is located in the central portion of the property on Gouin Peninsula.

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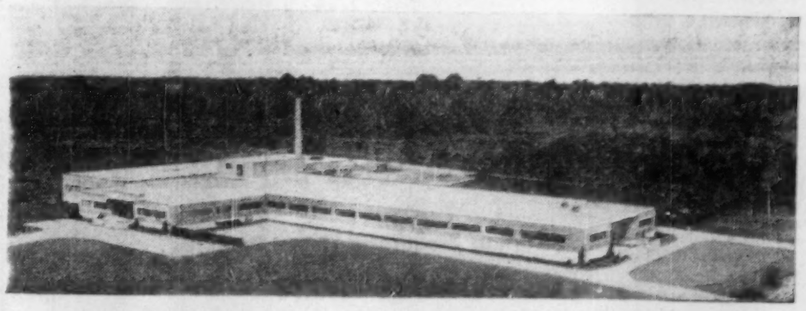

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WRITE BOX 885, THE FINANCIAL POST, TORONTO

GIANT BRITANNIA commercial airliners take shape in a British Bristol plant. Latest chitchat in the U. K. aircraft industry says TCA is thinking about Britannias for its long-range inside-Canada flights.

TCA Buying Britannias?

May Use Bristol Craft for Domestic Runs: U. K. Report

Special Correspondence

LONDON — Ten years of hard postwar development are now behind Britain's aircraft industry. At Farnborough the world's airmen met recently to see how things were going.

All facts considered, there's a lot for British aircraft makers to celebrate, and last week the air show was in the nature of a party for 20,000 invited guests. They were met with smiles, cocktails—and waiting order books.

Some of the color and enthusiasm of previous years wasn't at the great air show.

Partly it was the grim realization—never more severely clear—that Britain exports or dies.

Partly it was that not so many brand-new engines and planes were on show this year.

But largely it was because of the Suez crisis.

Apart from war clouds things looked bright for the industry itself.

Since last year—when TCA led an interested queue of potential buyers to view the **Vickers** 1000 transAtlantic jet transport (shortly afterward scrapped on government orders)—U. S. builders have buttoned up the long-range jet market.

But **Rolls-Royce** can report sales of Conway engines to Canada, Germany and India to power U. S.-built aircraft.

A lot more operators, anxious to save hard-to-come-by dollars, were talking terms with Rolls-Royce.

In all other air transport fields, British industry was offering some top-class planes and engines.

The Viscount success story needs no repeating. With some 345 of the turbo prop, short-medium range liners on order or delivered, Vickers Armstrong appears well set to hold that market for the next few years.

Improved versions carrying more passengers at higher speeds are under development and one of these was on show.

More than 50 long-range **Bristol** Britannias are on order and production is being geared up for further hoped-for sales.

A recent Canadian and U. S. sales tour seems almost certain to produce some new purchases. Best prospect: **Northeastern Airlines.**

Rumors around Farnborough had **TCA** thinking again about some Britannias for use on long-distance internal services.

(Britannia production is going ahead at full throttle, although BOAC has delayed putting its new Britannias into regular passenger service. The postponement was due to engine icing difficulties, which Bristol hopes to solve this year. However, BOAC already has used its Britannias in troop-lifts to the Middle East.)

On the 2,000-mile routes where speed is more valuable than the relative economy of turbo props the DH Comet 4 is a strong contender.

De Havilland spokesmen pointed out that despite lost years following the earlier Comet disasters the new design already in production was at least two to three years ahead of its U. S.-built opposite numbers. The recent order by **Capital Airlines** has meant a tremendous boost for spirits here.

The flying display itself was aimed to show the guests, including two hefty Russian delegations, that Britain is not short of ideas.

Highlights:

—The flypast and steep climb of a four-engined Lincoln bomber using only one Rolls-Royce Tyne turbo prop mounted in the nose.

—A Hunter fighter fitted with a new reverse thrust device on its Avon engine that blasted a third off the normal landing run. This is a vitally important invention for operators worried about the problems of giant runways for the new generation of big jets.

—The tiny Folland Gnat fighter. Smaller than the average private owner's run-about, this midget can fly faster than sound and packs a mighty punch with 30-mm. cannons. Ordered by India it is a source of interest to Finland, Holland, Belgium, New Zealand, Germany, Yugoslavia, Switzerland and Israel. The U. S. and Canadian navies have asked for full information on a naval version.

—The "things-to-come" Fairey Delta 2, holder of the world's speed record of 1,132 mph.

In the past the main criticism of the annual show was that while glittering new prototypes flown expertly make for a fine spectacle, the would-be buyer got little more than an indication of what could be expected some far-off day.

This year, however, the guests left having seen few really new planes, but knowing what they saw could be bought, and delivered, at competitive rates.

For the industry the chips were down.

The long period of expensive experiments, of disasters and successes, was over. Sales figures indicate this latest Battle of Britain was on the way to being won.

Winning Battle of Britain

Year	U.K. Aircraft Engine Exports ($000,000)	U.K. Total Aircraft Exports ($000,000)
1946	5.2	41.1
1947	11.3	70.3
1948	9.0	73.1
1949	13.9	96.2
1950	14.7	96.7
1951	22.4	118.6
1952	24.4	126.5
1953	56.9	185.1
1954	58.3	157.1
1955	62.2	185.3
1956, Jan.-June	44.8	182.8
Total	323.6	1,333.0

LABOR AND THE LAW

Willie Had Big Seniority, But Got Laid Off Anyway

Significant judicial, grievance and administrative decisions in the labor field are reviewed in this regular Post feature. Principles basic to industrial relations, unemployment insurance and labor law are highlighted. Here is another case:

Willie was laid off in mid-February from his job in a big grain terminal and wasn't recalled for about two months.

Meanwhile, the company retained at least one employee whose job classification was the same as Willie's yet who had less seniority.

Willie blew his top. He conceded that he lacked the qualifications of the man who had been kept on. But he felt he could do the job sufficiently well that his seniority should have ruled.

Before an arbitration board:

Willie argued:

He was capable and qualified to do the work required in his classification of millwright's helper.

Admittedly, the less senior worker had additional skills not ordinarily required of a helper. But there had been no complaints of his (Willie's) work. Therefore, he should not have been laid off, regardless of the company's desire to have a more versatile man on the job.

The company said:

The man who had been retained had done work of which Willie was not capable. He was a more skilled worker.

The laid-off employee won his point.

The board examined the contract between company and union and said:

"The grievor had six years more seniority than the other man and had the right to exercise his seniority provided he was capable and qualified to undertake the same class of work.

"The company was not prepared to deny that he was capable and qualified to perform the helper work available (at the time he was laid off).

"Admittedly the grievor may not have been capable of performing all the work subsequently assigned by the company to the other man, part of which called for application of higher skills than those normally required of a millwright's helper.

"The company was free to ignore the greater seniority of the grievor if there was reasonable evidence that he was incapable and not qualified but not . . . simply because he was less capable and not as well qualified."

Willie was competent within his job classification. Whether he had additional skills was immaterial.

Source: Labor Arbitration Cases published for the Central Ontario Industrial Relations Institute by Cartwright & Sons, Toronto, 31-7-56, p. 194.

Bank Staff Changes

Nova Scotia:

P. V. COULTON, manager, Islington Avenue and Advance Road, Toronto, Ont.

J. T. STRONG, accountant, Somerset & Bronson, Ottawa, Ont., to be accountant, London, Ont.

E. G. TAYLOR, supervisor, general office, Toronto, to be manager, Edmonton, Alta.

W. H. N. HITCH, to be accountant, Eglinton & Bathurst, Toronto.

E. STEWART, to be accountant, Port Arthur, Ont.

Commerce:

H. F. ATHERTON, accountant, Timmins, Ont., to be manager, Scarborough Bluffs, Ont.

C. J. P. BELL, to be assistant accountant, Timmins, Ont.

G. D. FINLAY, assistant accountant, Parliament & Carlton, Toronto, to be accountant, Parliament & Carlton, Toronto.

J. D. FINNIE, to be an assistant manager, personal loan department, Toronto.

W. M. FULLER, assistant accountant, Timmins, Ont., to be accountant, Timmins.

R. A. HALL, accountant, Lansing, Ont., to be an audit officer, regional office, Toronto.

S. HAWORTH, an assistant accountant, Eighth Ave. W., Calgary, to be assistant manager, First St. W., Calgary.

W. P. HLADKY, an assistant accountant at Centre St. & Eighth Ave. W., Calgary, to be manager of new branch, Fort Smith, N.W.T.

R. R. HYNDMAN, to be an assistant accountant, Kitchener, Ont.

P. P. KOSTIUK, accountant, Manning, Alta., to be accountant, Lamont, Alta.

W. L. KRESS, to be manager, Wharncliffe Road, London, Ont.

J. A. L'HEUREUX, manager, La Sarre, Que., to be manager of new branch, Valleyfield, Que.

T. H. MILLER, accountant, Peterborough, Ont., to be accountant, Windsor, Ont.

N. E. PHILPS, to be accountant, Scarborough Bluffs, Ont.

A. A. SECOURS, accountant, Farnham, Que., to be manager, Prelighsburg, Que. branch, which was placed on an independent basis effective Sept. 4, 1956.

G. M. SIDDALL, accountant, Picton, Ont., to be manager of the new branch, Wallaceburg, Ont.

J. D. URQUHART, to be accountant, Douglas & Cormorant, Victoria, B.C.

W. G. WEBER, to be accountant, Chesley, Ont.

F. E. WILSON, to be accountant, James & Barton, Hamilton, Ont.

Asphalters Check On Roof Fires

A strong selling argument for asphalt roof shingles has been their fire-resistant qualities. Next month, when various organizations across Canada co-operate in National Fire Prevention Week, that argument is going to be backed up by the results of survey made by the Ontario Fire Marshal.

The survey covered the ten-year period between 1946 and 1955, and showed that out of a total of 2,635 fires caused in Ontario by vagrant sparks, only 2.5% occurred on fabricated roofs such as asphalt shingles.

"This is one reason," reports the Asphalt Roofing Manufacturers' Association, "why asphalt shingles are now being used on more than 90% of Canada's new homes. A review of some 54,000 single-family dwellings financed under the National Housing Act last year revealed that above 95% would carry asphalt shingles."

Asphalt shingles are surfaced with non-flammable mineral granules and the asphalt manufacturers claim that the increasing use of such shingles is a major reason why roof fires caused by flying sparks have been steadily decreasing. Last year, the 1955 total of 72 roof fires caused by sparks in Ontario was a new low record.

A 5,000-house survey made by the Asphalt Roofing Manufacturers Association in Toronto of homes built prior to 1935 showed that many of these had used asphalt shingles to cover their wooden roofs. Of the totals 82.4% carried asphalt roofing.

Ridout To Enlarge Investment Branch

Greater activity in the rapidly developing co-operative building field is planned by the **Ridout Organization,** following its acquisition of **Independent Real Estate Ltd.,** Toronto, which operates mainly in real estate investment.

The acquisition, states Ridout, means the immediate enlargement of their investment division under the management of A. M. Altstetder. Andrew Chepely, previously the principal of Independent Real Estate, is now assistant manager of the Ridout investment division.

REAL ESTATE

A CANADA-WIDE MARKETPLACE FOR BUYERS AND SELLERS

Atlantic Provinces Score With Home Building Surge

With New Brunswick well ahead in the race, the Atlantic provinces, according to the latest survey are heading for a record construction year.

One of the outstanding features is the regional emphasis on residential building, a category in which most other areas in Canada are weakening. At the same time, the Atlantic provinces are keeping up with the general cross-country surge in engineering construction.

In a survey of the construction position in the Atlantic provinces, the Canadian Construction Association had these comments to make:

Newfoundland

All the main categories of building and engineering construction are higher than last year. Road, highway and airdrome construction accounts for 22% of the forecast 1956 total, a proportion considerably higher than in other provinces.

Nova Scotia

While building and engineering construction are both expected to increase by $5 million each compared to last year, the sub-groups of these main categories of construction show mixed trends. Under building construction, the 1956 forecasts anticipate more residential, industrial and commercial construction but less spending on institutional and other building construction. Likewise in the engineering section the electric power; road, highway and airdrome; railway, telephone and telegraph and gas and oil facilities sub-groups are higher and the totals for marine construction, dams and irrigation, etc. will likely be lower this year.

New Brunswick

The main strength of this year's program lies in substantially higher outlays on residential construction ($57 million compared to $39 million in 1955). However, with the exception of road, highway and airdrome construction and electric power construction, where small declines are expected, spending on all other main categories of building and engineering construction is expected to be somewhat greater than last year.

And to back up the estimates, the CCA quotes these mid-year cumulative figures for housing in the region as compared with the same period last year:

	Starts	Completions	Under Constr. June 30
— Atlantic Provinces —			
1956	3,271	2,208	7,372
1955	2,742	2,003	6,476
— Newfoundland —			
1956	709	549	3,173
1955	348	299	2,914
— Prince Edward Island —			
1956	40	79	89
1955	89	32	135
— Nova Scotia —			
1956	1,392	980	1,999
1955	1,357	1,124	1,722
— New Brunswick —			
1956	1,130	600	2,111
1955	948	548	1,705

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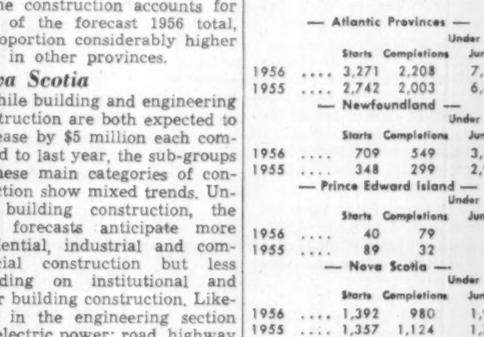

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• • •

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From Britain, a lighter, more powerful foam fire extinguisher. Claimed to produce 50% more foam, it will work just as well at freezing point. Mounted on a two-wheel trolley it's intended for use in factories and ships. Takes less than 10 minutes to recharge.

• • •

Anti-Roll Fin

Also from Britain, a marine fin claimed to reduce rolling on small craft by 80%. Operated by high-pressure, hydraulic rams, the fins have to be fitted and removed by a diver. Non-retractable, they are designed for minimum weight and space.

• • •

Giant Economy Year

Latest commodity to join the ranks of the king-sized, a 2-ft. square calendar. Claimed to be useful for long-range planning, booking meetings, promising deliveries, it hangs on the wall. It incidentally lasts 25 years.

• • •

For Wire Worms

For do-it-yourselfers who want to do it with wire, a bending tool and a set of instructions on cutting, shaping, soldering, hardening, softening and even straightening wire. Try it for hat racks, mobiles, lamp shades, letter holders, egg lifters or numbers on the front door.

• • •

Noises Off

Ideal for rooms which face onto tram tracks, but intended really for industry, a portable "sound-catcher" that catches the louder factory noises as they bounce from wall to wall or floor to ceiling. This acoustical unit, shaped like a pyramid, hangs from the ceiling.

• • •

Skid Rid

The fast-moving rug that acts as a danger trap on a polished floor can be coated with a new, quick-drying rubbery film. Acts as an underlay and an anchor. Will not wash off.

• • •

Helping Hearers

Putting on a hearing aid no longer implies that people want to hear better—they may be bored. A receiver that looks like a hearing aid is part of the latest midget radio, small enough for the shirt pocket. Made in the U. S. and selling for less than $5, the set costs nothing to run. It's powered by a diode rectifier, needs no battery, has no tube.

• • •

Cleaner Saucers

For the guest who insists on using the saucer for an ash tray, a tiny, curved glazed earthenware trough that fits on the rim of the saucer may be a hint. Supplied in sets of four, can also be used for tea bags, lemon slices, after-dinner mints and anything else that one wants to balance beside the cup.

• • •

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A stud designed particularly for automatic machinery cuts its own thread and remains fastened in a single operation. These self-tapping studs can be installed rapidly with a normal power tool.

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New Catalogue

Link-Belt Ltd., Toronto, announces a new catalogue of heavy-duty bearings available to industry. The line has been expanded to include bearings for shafts up to 11 in. diameter. The bearings are designed for operation in steel mills, mines, foundries and oil fields, etc.

Champion Fund Assets Drop 2%

Champion Mutual Fund of Canada Ltd., Montreal, net assets at Aug. 31 totaled $200,738, 2.1% lower than net assets of $205,094 at July 31.

Assets at Aug. 31 were invested 91.12% (89.89% at July 31) in common stocks, 4.22% (4.25%) in preferred stocks, 4.66% (4.67%) in government bonds, and nil (0.54%) in cash and other assets.

Common holding consisted of 18.61% (18.56%) base metals, 12.78% (13.55%) pulp and paper, 14.85% (14.56%) oil and gas, 7.45% (6.97%) steels, 7.6% (7.64%) banks and finance, 5.21% (5.24%) building materials, 1.7% (1.57%) transportation, 5.5% (5.58%) public utilities, and 17.42% (16.22%) miscellaneous.

Portfolio changes during August included:

—Addition of 125 common shares of **Dominion Tar and Chemical Co.**

—Increase in holding of **British American Oil Co.** to 50 shares (from 25 shares).

New Manitoba Assessment To Change Grants Formula

From Our Own Correspondent

WINNIPEG — A new equalized assessment for Manitoba applicable for 1957 and 1958 which increases the present one 43.77% will force drastic revision of the formula under which the province distributes education grants to its municipalities.

The nature of the change is a problem of government policy not yet announced nor decided.

It will come at the next legislative session. Otherwise the effect of the new assessment would load the municipalities with a commitment of between $1 million and $2 million for education costs now paid by the province. The burden would fall most heavily on the urban centres.

The new assessment announced Sept. 15 by the province's Equalization and Appeal Board is $985,796,200. The former one made in 1954 was $673,545,000.

This last figure was a reduction of $126 million from the one first submitted by the board and stirred up one of the main controversies of the 1955 legislative session.

The latest figures indicate the original one made in 1954 was perhaps not far from correct.

The equalized assessment designed to reflect uniform assessment standards in all the municipalities at first was used to determine what each municipality had to pay the Government under the municipal commissioner's levy and other levies made by the province.

In recent years these have all been discontinued and the equalized assessment is now employed in apportioning welfare and education grants.

Education is the major one. Under the formula for determining them the department fixes a floor of $2,200 per teacher for all qualified teachers in a municipality. As an example if a municipality has 40 teachers $88,000 is marked for education purposes.

It requires each municipality to make a seven-mill levy on what is termed the "balanced assessment" which is the equalized assessment plus business tax assessment.

Using the same example the yield of the seven-mill levy is deducted from the $88,000 and the balance is the amount of the government grant.

Last session over $8 million was voted for basic education to be apportioned on this formula.

In application of it to a new equalized assessment upward of $300 million more than the old one, the seven-mill levy would yield approximately $2 million which the municipalities would be required to pay and a corresponding amount less would be paid by the province provided the number of teachers in 1957 and 1958 was the same as in 1956.

It is estimated that 250 more teachers will be required next year and even if the province paid the whole cost at $2,200 per teacher it would still load the municipalities with an additional $1.5 million.

The assessment increase is biggest in urban and suburban municipalities. Of the five incorporated cities James has the biggest, 105%. Winnipeg is up 57%, St. Boniface 68%, Brandon 45%, Portage la Prairie 37%.

For towns and villages the increase is 41%, for Winnipeg suburban municipalities 37% and smallest in rural municipalities. Their new assessment is $287,812,000. The old one was $249,701,000.

The equalized assessment is made every two years. If there is another two years hence it will likely be the last.

The Government, aiming for one assessment to apply all over the province, set up a provincial assessment branch in 1950 and appointed a provincial assessor, who has already covered about half the province.

His figures have been accepted as the equalized assessment in the municipalities in which he has completed his work and ultimately will become the equalized assessment in all of them.

For the new assessment any municipality has the right of appeal to the municipal and public utility board.

Chartered Trust Adds 3 Branches

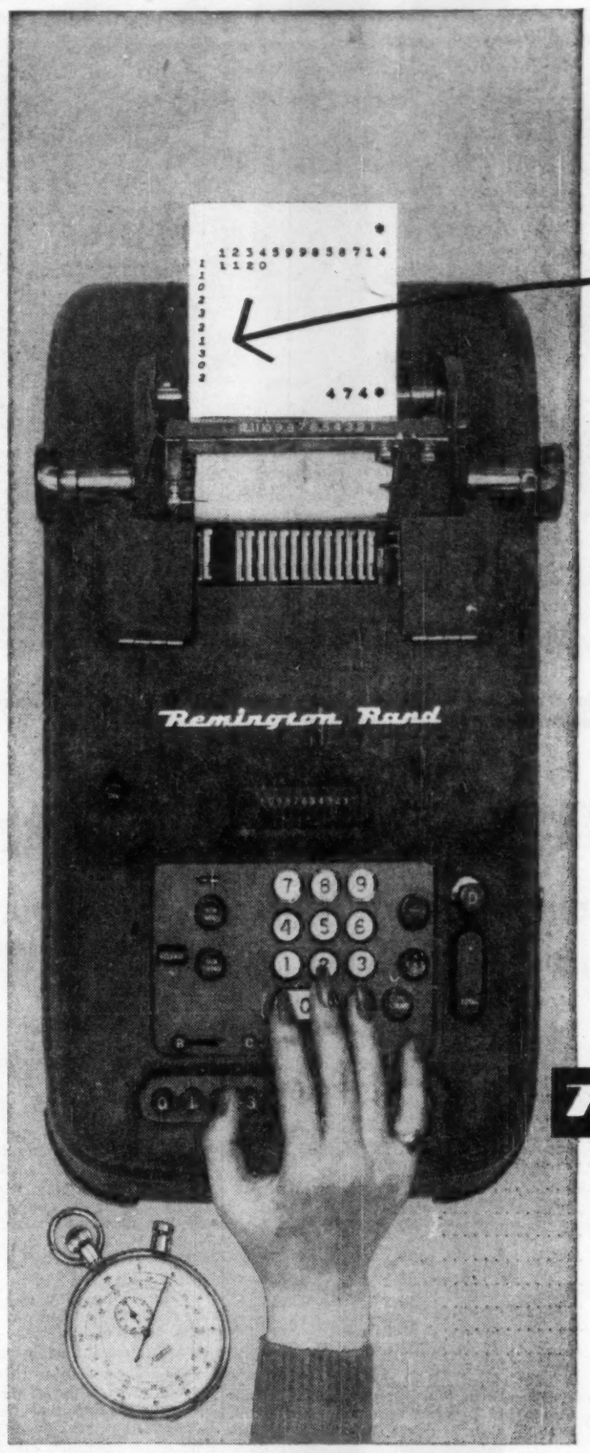
Three new branch offices are being established by **Chartered Trust Co.** to bring its real estate salesmen closer to customers in Toronto and district.

One of the three is already in operation at Danforth and Woodbine Aves., in Toronto's east end. A branch providing real estate and other services will open Oct. 1 in nearby Oakville, at 91 Colborne St.

Work is under way on another branch at Bloor St. W. and Royal York Rd., Toronto. Scheduled to open Dec. 1, this west-end office will have a savings department as well as a real estate staff.

In addition to its downtown Toronto head office, company has branches in the Yonge-St. Clair district of central Toronto, and in Montreal.

Chartered Trust increased the rate of interest paid on savings deposit to 3% from 2½%, Sept. 15. Interest will still be computed on a quarterly minimum balance as in the past.



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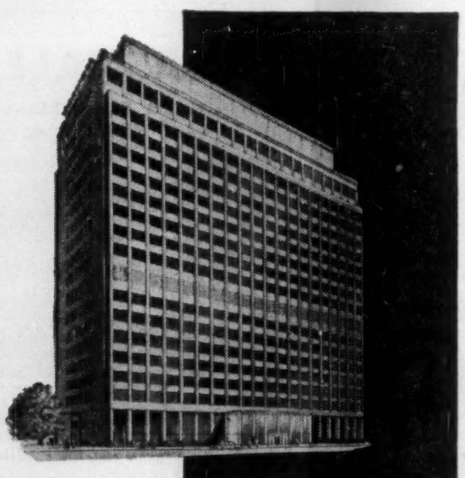
AUTOMATION FOR CANADIAN BUSINESS

MacM. & Bloedel Plans New Mill

MacMillan & Bloedel Ltd. plans to build a $500,000 grocery bag plant in the Vancouver district, company announces.

A $63-million expansion program is now under way. This includes installation of two newsprint machines, a general purpose paperboard and coarse paper machine, and an increase in capacity for unbleached kraft pulp to 500 tons daily.

Newsprint machines will have a 600-ton daily capacity and paper and board machine 180 tons daily. First newsprint and board machines are scheduled to begin production in 1957, and second newsprint machine in 1958.



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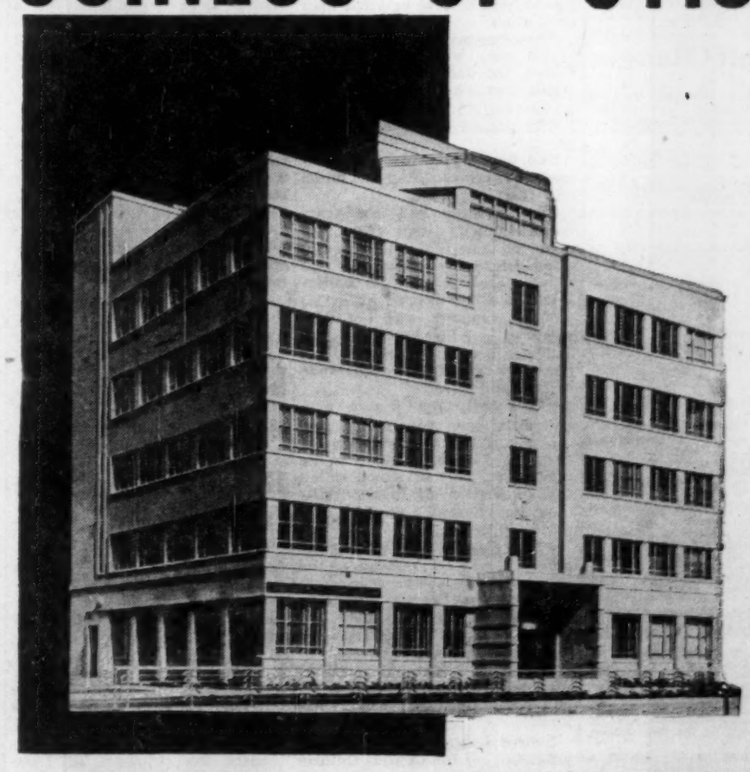

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The Financial Post

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Will They Barter Away Your Heritage?

British Columbia can become the future industrial empire of the North American West. It can become the only now-settled area of North America with plentiful reserves of really cheap power. It can enjoy for decades to come all the advantages of owning great blocks of cheap power at a time when the rest of the continent is paying steeply rising power costs.

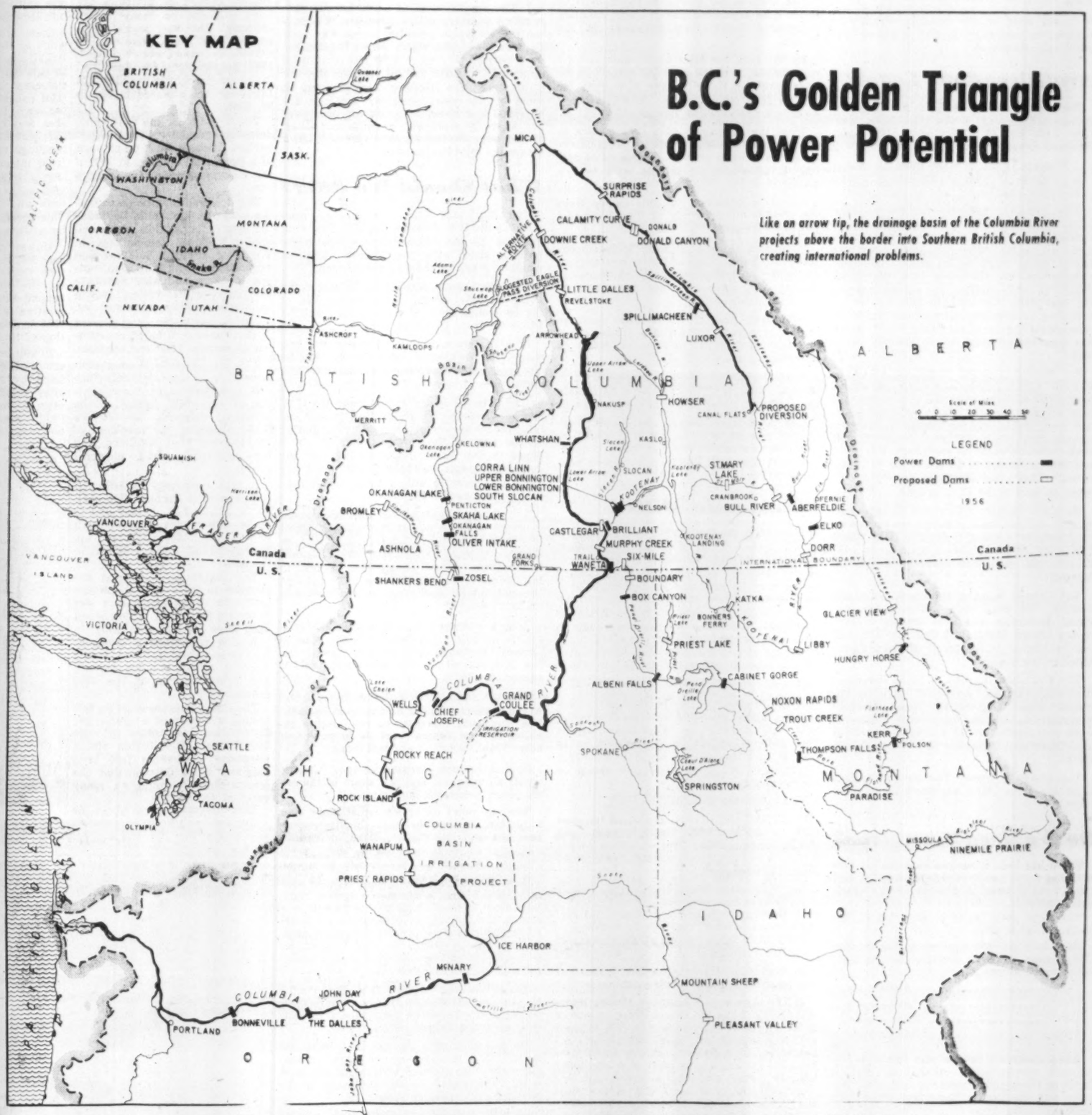
This is the foreseeable outlook for British Columbia. Only two things could upset it:

● If atomic power becomes available — by some unforeseen new discovery — at no more than about three mills per kwh within about 25 years. No atomic expert has yet prophesied anything like this.

● If Canadian politicians barter away B.C.'s power heritage for the sort of quick return that always appeals to politicians — or to avoid unpleasantness with the United States — or for any other of the reasons that politicians like.

The Financial Post has followed closely all the developments in the Western power picture in recent years. Our Ottawa correspondent wrote the first full accounts of power developments in the Yukon Basin and on Canadian plans for river diversions in the Columbia Basin (June and December, 1954).

Here is what is involved and why it means so much to Canada:



By MICHAEL BARKWAY

In a few months Ottawa will start secret negotiations with the United States to settle the basis of division between the two countries of a very important and permanent natural resource—the waterpower in rivers which cross the international boundary.

The decisions will involve the livelihood of Canadian generations not yet born. They concern material wealth to be measured in untold billions. They most directly affect the whole future industrial expansion of British Columbia.

In the foreground of the Canada-U. S. talks —and dominating all else—will be the Columbia River. In the background lie parallel problems about the use of the Yukon River, about New Brunswick's need for power from the Saint John, and about the prairie provinces' opportunity to make full use of their scanty water-resources.

The Columbia River is out in front, because it has already erupted into acute international controversy. Under intensive development in the Pacific Northwest states for years, it has built up the whole industrial economy of that region. Not yet developed in British Columbia, it offers even more glittering prospects there. It promises enough hydro power—at rates little higher than Kitimat at full development—to give B. C. a preferred position over any other region of North America in attracting new industry. B. C. could have—certainly for 30 years, probably for 60 years or more — a great reserve of hydro power at rates comparable with today's lowest; and this at the very time when all the rest of North America is being driven to more expensive sources of energy.

But all this depends on the forthcoming Canada-U. S. negotiations.

A group of federal officials is now preparing Canadian policy ready for the meetings with the Americans. They have a staggering potential in their hands: if it doesn't overawe them, it ought to.

They are, as usual, an anonymous, honest, highly intelligent group. They know that their lot is only to recommend, and that ministers will decide. Even now each one of them is influenced by what he knows of the prejudices of his own departmental minister, and by what he surmises of the reactions of the Prime Minister and the Cabinet's collective voice. (Officials generally like to make the kind of recommendations which will be accepted.)

With this group now at work in Ottawa and with the B. C. provincial election out of the way, this is a good time to summarize the stakes Canada is fighting for.

There won't be very many more chances for doing so.

Negotiations with the U. S. won't start before the U. S. elections in November, and there may be some delay after that. But Canada wants to get these talks started as soon as possible after the elections. And once they start secrecy will descend.

Negotiations must be private, it is explained, because only then can there be give and take. Canada — that is — wants secret talks so that the U. S. can yield without a public outcry; and the U. S. wants them secret so that Canada can yield.

It is behind doors that the great power heritage of B. C. will be preserved or given away.

By the time the decisions are worked out, all that will be left will be to blame or applaud the politicians for what they did. So this is the time to see what the negotiations have to settle, and what upshot we would like.

Fight for Snow and Ice

For once the Americans are entirely right to think of Canada as the country of snow and ice. It's the snow and ice of the Rocky Mountains which they are trying to get for their own use.

Snow and ice contribute most of the water that finds its way down the Columbia and makes cheap power. That's why the flow of all these rivers varies so greatly between summer and winter.

And it means that the power problem is not "how much," but "when."

For at least three months every summer the freshets of the Columbia and its tributaries are pouring over the top of every dam —turning no turbines, providing no power. For at least as long every winter there isn't enough water to meet the power need.

The dream of all the power people is to save that tremendous wasted flow and spread it over the winter months when there isn't enough flow to turn the generators at full capacity, and when demand for electricity is greatest.

Take the Kootenay or the Columbia or the Thompson or the Fraser: the flow charts all show the same curve—consistently low from October to April and peaking sharply between May and August.

(At the International Boundary near Trail, the Columbia River discharge into the U. S. never exceeds 80,000 cfs. from October through to May. Most of the time it is less than half that. In May it averages more than 160,000 cfs., and in June well over 240,000 cfs.)

The way to get more power — without even building any more generators—is to level off the flow. And the way to do that is to store the floodwaters behind the biggest dams you can build and let them go when you most want them.

That's what the U. S. wanted to do with its proposed dam at Libby, Mont. on the Kootenay. It would have got some power at the site; but the main point was to get a little more evenness into the flow feeding the big plants down the main stem of the Lower Columbia.

Libby was a piker compared to the storage Canada can get on the Columbia. It would have stored 5 million acre-feet of water.

On the Canadian Columbia it is believed that we can get:

—3.4 million a.f. at Luxor, with the Kootenay turned back into the headwaters of the Columbia.

—11.8 million at Mica Creek;

—4 million at Murphy Creek;

—A total of 19 m.a.f.

Storage Means Power

Canada's storage sites are a blessing of nature. They give us a natural advantage for the generation of power, if we choose to use it. The United States covets them, because it has not been so well favored.

It covets them also for a shabbier reason. If we'll provide free storage, it can avoid the domestic disputes about the sites it has got. Ask a Democrat like Senator Neuberger. Look at a sober engineering journal like the "Engineering News Record." In a special article on the Columbia problem last month, it said:

"Many storage sites with excellent benefit-to-cost ratios (in the U. S.) have been passed over because of objections by various local and special interests . . .

"Rising construction costs, and the discarding of several of the most attractive water-storage sites has forced the U. S. to an earlier-than-expected consideration of:

1. Less advantageous sites in the U. S.
2. Storage in Canadian portions of the Columbia River.
3. Introduction of large blocks of steam and/or nuclear power. The Corps of Engineers is presently conducting studies along these lines."

That fixes Canada's role, as some Americans see it.

U. S. Gets the Jump

Until two or three years ago, the Americans were working like beavers to develop their share of Columbia River power. Their achievements, in dams and power plants, were far ahead of ours. Their studies of future expansion possibilities were even farther ahead.

Between 1940 and 1951 the hydro power output of the Pacific Northwest states increased by 326%.

In British Columbia between 1939 and 1954—a longer period—output increased by only 174%.

Yet the population of B. C. was expanding faster:

1931-51: B. C.: 68%.
Canada: 35%.
1930-50: Pacific Northwest: 50%.

Obviously in terms of hydro power per head of population, B. C. has been slipping back.

It had the installed capacity—more per head than the Pacific Northwest states. But it wasn't developing it as effectively.

Enter McNaughton

The Americans, until the last few years, had every excuse for thinking that Canada was asleep; and that since we weren't doing anything about the Columbia they could dispose of the river as suited them best.

The shock came when the Canadian Section of the International Joint Commission prevented the U. S. from building the proposed dam at Libby, which would have flooded back 42 miles up the Kootenay into Canada.

The free ride was over, and American indignation was boundless.

General McNaughton had come into the picture. To this day the Americans still recognize better than most Canadians what General McNaughton has done — almost single-handed — to preserve Canada's heritage of power.

The General isn't always tactful: he hardly ever wraps his arguments in the cottonwool of diplomacy. He calls a spade a spade even when he's talking to Americans; and this deeply shocks some of the more sensitive diplomats who flourish around here. To many hardier souls it is extremely refreshing.

He isn't always 100% accurate when he reels off figures out of his head. His enthusiasm sometimes overruns details.

But informed Canadian opinion would be bitterly suspicious of any government policy on water-power which didn't carry McNaughton's support.

If it should ever happen that our political leaders are tempted to "sell out" under American pressure— and they all swear it hasn't happened yet — the first sign would be that General McNaughton had been elbowed out of the picture.

Crux of the Dispute

The whole Canada-U. S. dispute hinges on two things. You'll hear about them repeatedly in the next months and years. They are:

- Diversions.
- Downstream benefits.

This is what they mean:

1. The diversions involved in the Columbia controversy are two:

—Canada's plan to turn the Kootenay River back into the headwaters of the Columbia before it starts on its long loop through the United States. It's easy to do, and it would add 5,000 cfs. (possibly 8,000) to the flow of the Columbia throughout its length. (See FP, June 26, 1954.) But it would kill the U. S. plan for dams on its section of the Kootenay at Libby and Katka.

—Canada's plan to divert the Columbia itself through the Monashee Mountains into the headwaters of the South Thompson, and so down the Thompson into the lower Fraser. (FP, Dec. 26, 1954.)

In each case the diversion involves only the floodwaters which can be stored. It doesn't mean leaving a dry channel in the old river bed, but taking off the wasted floodwaters and pushing them into a new course where they can be beneficially used.

2. Downstream Benefits. This is the phrase used to describe the gain to a downstream state from the power potential it derives by water regulation or storage in an upstream state. It is recognized in international law and in interstate arrangements in the U. S. The U. S. insisted on it in a comparable case (at Grand Falls on the Saint John River) when Canada derived some benefit from storing water on the U. S. side of the border.

But the United States has never applied it or even acknowledged it, when Canada should be the beneficiary.

Up to this present date, the U. S. has never offered Canada any adequate return for the power which it could develop—virtually free —from water stored in Canada.

Even in the Libby case, where the United States was demanding that British Columbia should provide one third of the storage area, it refused to return any share of the power —or to pay for anything except the direct physical damage in the area it wanted to flood.

Only in the last year—only, in fact, since they began to see that Canada meant business with its diversion plans — have U. S. authorities even vaguely conceded the principle of paying something for downstream benefits.

Use of Mica Storage

The hub of the present dispute is the point where Canada's diversion plans and Canada's claim for downstream benefits meet.

And that is in the use of the 15 million acre-feet of stored water which Canada will have behind the mammoth Mica Creek Dam.

(15 m.a.f assumes that the Kootenay has been diverted. Without that it's 11.8 m.a.f.)

Mica Dam, which **B. C. Power Corporation** would like to build, is the vital point in the development of the Canadian Columbia, whoever builds it and whatever happens to its stored water.

It will provide ultimately nearly 1.5 million kw. of on-site power, which can be transported relatively cheaply to the Vancouver area.

But it also will provide this huge reservoir of stored floodwater which can be released in the winter to boost power output just when natural flows are lowest and power is most needed.

—If the regulated flow is allowed to roll on down the Columbia into the U. S., it will bring them at least 15 billion kwh. of extra power every year.

This great increase will cost the U. S. nothing. It will come from the series of dams now contemplated, simply by increasing their capacity at periods of low flow.

—If, instead, this regulated flow is diverted through the mountains into the Fraser basin, it will give Canada an almost equivalent amount of increased power.

Power capacity west of the mountains is tentatively estimated at 13 billion kwh., to be added in the winter for regulating peak loads. None of the water would have to go into the Fraser in summer when its flow is already high.

Obviously if Canada can divert this controlled flow where it can be used wholly for Canadian benefit, this must be reckoned one of Canada's greatest natural resources.

This can't be bargained away for a price which is not yet even known.

Nor, unfortunately, can it yet be claimed as a sure and certain thing established by scientific proof.

Here is a summary of what is known of the possibilities, as Canada prepares for its negotiations with the United States:

Diversions Possible

Because Canada started so very late on its thorough studies of the Columbia basin, our information about what can be done still lags short of complete engineering certainty.

H. G. Acres & Co. is finishing up essential investigation of the proposed damsites at Bull River (for the Kootenay diversion) and Murphy Creek (last dam on the main stem of the Columbia before it flows into the U. S.).

Damsites at Priests Rapids and Little Dalles (below Mica) are being drilled. Luxor and Donald, on the upper Columbia, still have to be thoroughly tested.

But the key big dam at Mica is known to be feasible and economic. Its cost is estimated at $250 million.

B. C. Power Corporation wants to be allowed to build it, and is now making its own detailed engineering investigation.

B. C. Engineering, as consulting engineers for the Government, is continuing studies into the engineering and economic feasibility of the proposed diversion of the Columbia into the Fraser. Its first study had to be devoted to the possibility of using a series of ten low-level dams on the Fraser: the fish people at first thought that was what would suit the salmon. Actually it doesn't suit either fish or power, and B. C. Engineering is now working on more hopeful plans for using fewer and higher dams.

So we are really at this stage in discussing the diversion plans:

- Nobody can swear that the plans are possible, and prove it.
- Nobody has yet been able to find any reason for doubting that the plans are feasible.
- Experience to date has consistently supported the general outline of the diversion

(Continued on page 26)

If any U. S. government official still believes that Canada's Columbia River diversion plans are only bluff, he has another think coming.

Canada has not yet decided, firmly or finally, whether to divert the Columbia into the Fraser or not.

The Government doesn't yet know:—

- **How it can satisfy the fishing interests.**
- **How the economics of the Fraser diversion will work out in detail.**
- **What the U. S. may eventually offer us for not diverting.**

But it does know:—

- **That the planned diversions are physically possible and legally unassailable.**
- **That they offer promise of tremendous advantages to British Columbia for decades to come.**
- **That any Canadian Government which lightly abandoned these advantages would be guilty of the grossest treachery to the long-term future of Canada for which it is responsible.**

Will They Trade Away Your Power Heritage?

(Continued from page 25)

plans. Every bit of fresh knowledge has confirmed the possibilities, and often improved them.

● Latest word on the Columbia-Fraser diversion, in particular, is that it grows "increasingly attractive."

Are Diversions Legal?

Here is the flat answer from the Canadian Government, given by the responsible minister, Jean Lesage of Northern Affairs and National Resources, on May 9, 1955:

"Canada's right to make these diversions is guaranteed under the Boundary Waters Treaty of 1909."

When Canada tried to get the opposite view put into the 1909 Treaty, Mr. Lesage recalled, the U. S. Attorney-General (Harmon) wrote that what Canada wanted was really "A servitude which makes the lower country (in the Columbia case, the U. S.) dominant, and subjects the upper country (in this case, Canada) to the burden of arresting its development and denying to its inhabitants the use of provision which nature has supplied entirely within its own territory."

Sir Wilfrid Laurier, explaining to Parliament that Canada had been compelled against its will to accept the U. S. view, said that at least Canada would have the same upstream rights. "If we choose to divert a stream that flows into your territory, you shall have no right to complain, you shall not call on us not to do what you do yourselves." That's Sir Wilfrid's description of what he said to the U. S. in 1909.

Said Mr. Lesage: "Now that Canada represents the upstream interests we cannot be criticized for wanting to assert a right which was more or less imposed upon us in conditions that were then against our national interests."

But Canada is being criticized, hotly and heavily. We have been told that the proposed diversions would do "serious injury" to the United States, and that the U. S. will not be limited to the forms of redress provided in the treaty.

The Canadian position is being described in Washington as "legalistic," or even immoral. The "Engineering News Record" comments on this, and says: "U. S. adherents must rid themselves of the idea that Canada's diversion proposals are somehow immoral."

The treaty is there. The natural advantages are there. Why shouldn't Canada use them?

Do We Need Diversions?

There has been a curious idea abroad that B. C. has great power resources to spare, and doesn't really need to conserve every available source.

The facts point, most clearly and irrefutably, the other way.

Here is a projection given to the Gordon Commission by B. C. Electric for the Vancouver area alone:

1955	520,000 kw.
1961	1,040,000 kw.
1967	2,080,000 kw.
1976	4,160,000 kw.

Some observers believe that this is an extremely conservative calculation; and it looks so when you compare it with what Ontario and the Pacific Northwest states both expect.

Ontario—through testimony by Chairman Richard L. Hearn of Hydro to the Gordon Commission—expects 1955's 4.5 million kw. to have increased to 12.5 m. by 1970 and 23.5 m. by 1980.

The Pacific Northwest—according to the U. S. Army and the Bonneville Power Administration — expects 1955's 4.5 m. kw. to reach 12 m. by 1970 and 41 m. by 2000.

Yet British Columbia has been — and is now — growing at a faster rate than either Ontario or the Pacific Northwest, both in population and in industrialization.

The rate of new capital investment is increasing in B. C. faster than anywhere else in Canada.

Between 1954 and 1955 it increased 28% in B. C. The Canadian average was 10%.

Between 1955 and the planned rate for 1956, B. C. showed an increase of more than 50%. The Canadian average was 21% (January forecasts).

The demand for power is rising in B. C. faster than anywhere else in North America —probably faster than anywhere in the world.

By the time the Mica Creek dam is built —if, indeed, it is the first big project to be undertaken—B. C. will have a market for all the Mica on-site power. It will already be time to look for new sources.

What the diversions offer is a chance to go on adding new power plants, progressively, as the demand grows — **and to go on getting it at prices comparable with today's lowest.**

American testimony to this comes from the already-quoted study of the "Engineering News Record":

"Canadian studies," it says, "point to the relatively huge blocks of power contemplated in the diversion scheme being available at less than three mills per kwh. even at the turn of this century."

"Relatively huge blocks of power" at three mills in the year 2000: it is a prospect that no other area in North America can even dream of.

Both the Pacific Northwest and Ontario forecast that by 1980 they will be largely depending on steam power or nuclear power.

The Americans always claim that these energy sources will be much cheaper by then. But nobody has ever seriously prophesied that they will be down anywhere near three mills.

Six Atomic Mills

The target of the atomic energy experts is six mills. W. J. Bennett, president of Atomic Energy of Canada, is always careful to say that no one can tell when atomic power may be produced at that price. But, on the assumption that it will be reached by the 1970s, Mr. Bennett told a House of Commons Committee this summer that by 1981 nuclear power "may conceivably account for as much as 10%-15% of total generating capacity in this country."

It won't be — or it needn't be — in B. C.

If B. C.'s water-power is handled properly, this lucky province will be developing more and more cheap hydro-power at the very time when all its competitors — in Canada and the U. S. — are having to rely increasingly on more expensive steam or atomic power.

What does the U. S. offer?

So far, nothing. The Canadian negotiators hope to find out what the U. S. would pay if the Mica-regulated flow of the Columbia were allowed to follow its natural course and reach their turbines.

But up-to-date Washington's great hopes seem to have been concentrated on the Canadian Government's breaking down and giving it what it wants for little or nothing.

They have been fed by a fair amount of Canadian muddling.

In particular Washington has drawn encouragement from these three things:

1. The clamor of the salmon-fishing interests against using the Fraser River for power development at all. In the long run, as General McNaughton and many others have repeatedly said, a fishing industry worth perhaps $30 million a year must, and inevitably will, be swept aside by a power industry worth billions of dollars. But in the short run it has great political appeal, and every effort has to be made to try to keep both salmon and power. Latest experiments in the U. S. (on the Cowlitz River) are rather hopeful.

2. The astonishing short-sightedness of some of Premier Bennett's earlier statements of B. C. policy. He used to seem anxious to press Canadian resources into U. S. hands: as when he tried to ram through the massive give-away of the Kaiser dam project, which Ottawa stopped; as when he solemnly told The Financial Post that only Americans could develop B. C. power, which B. C. Power Corp. has now effectively disproved.

It's always been difficult to know how seriously the Americans took Mr. Bennett — probably not very. Anyway they know now that he hasn't the authority to allow export of power (even in the form of controlled water). And they are certainly aware that Mr. Bennett and Mr. Lesage have been developing a new co-operative approach to these water problems.

3. The sensitiveness of some federal government quarters to U. S. pressure. Washington knows—again probably better than most Canadians—at just which points Ottawa can be pressured through a judicious mixture of appeals to goodwill and dire threats of grave displeasure. The effects of such pressure on some of the weaker-hearted brethren are observed and noted here. So far they have not seriously weakened government policy. If they ever do, Ottawa observers will know where the faint hearts were.

What Should We Offer?

One important offer has already been made to the U. S. through the IJC. The vital question to be decided before the negotiations start with the United States is whether it can or should be expanded.

The offer made already is to allow the U. S., for due return, a temporary use of the controlled flow of water which will be available from the Mica dam.

In cash terms, it will be worth not less than $100 million a year to the Pacific Northwest states, according to Canadian calculations.

This is based on the extra power the U. S. can get from the controlled flow once it has built all the power plants now contemplated for its part of the Lower Columbia. In a paper to the World Power Conference this summer General McNaughton estimated this extra power at 15 billion kwh. Other estimates put it even higher.

The power is valued, for this calculation, at seven mills, which is the estimated cost of the same amount of power generated by thermal plants. U. S. costs, said General McNaughton in his paper, are unlikely to fall below five mills for the most modern thermal plants operating semicontinuously on base load.

The Americans will not accept this estimate, anyway. Governor Jordan, who is General McNaughton's opposite number on the U. S. side of the IJC, has always said it is much too high.

But the financial calculation is not vital to the determination of downstream benefits. The Canadian Government has always insisted that its return must be in power or other "real terms" — not just money.

Said Resources Minister Lesage: "Canada wants an adequate and fair share of the extra power generated downstream."

The one point on which nobody has ever committed himself is what constitutes "an adequate and fair share" — though Ottawa certainly wouldn't look at the 20% which Premier Bennett was once ready to accept.

So far, also, Canada has not offered anything better than a **temporary** use of regulated flow on the Columbia. For an adequate return, the U. S. might be allowed the benefit until such time as British Columbia needs it to generate power on the Fraser. No period has ever been stated; but it is doubtful if it would be more than 20 years.

This, however, would help the Pacific Northwest states over their immediate power needs and give them plenty of time to plan alternative sources.

On the basis of a 20-year deal—with absolutely firm undertaking about the termination date—Canada very well might not need, within the stated period, its share of the extra power generated in the U. S.

In such case, Mr. Lesage has said, it might sell its share to the U. S. temporarily. But the sale would have to be under regulation like any other export of electricity, and it would have to be on a declining scale year by year.

"There is no intention," said Mr. Lesage, "to alienate power permanently."

The U. S. has so far spurned this offer. It obviously thinks it can get something better. "Most interested persons in the United States," said the "Engineering News Record," "were convinced—and still are—that this talk (about diversion) was a 'diversionary tactic' to achieve a better bargaining position over compensation for water stored in the Canadian portion of the Columbia . . . "

But it goes on to quote General McNaughton as saying that "under no circumstances can Canada afford not to divert eventually."

Census Delay May Slow Manitoba Redistribution

From Our Own Correspondent

WINNIPEG — A misunderstanding on when Ottawa can make available population figures of the 1956 quinquennial census may delay the report of the independent commission named in 1955 to make a new redistribution of Manitoba electoral divisions.

Without the figures the Commission can do nothing. The Dominion Bureau of Statistics say they will not be ready before January. This may make it impossible for the Commission to submit its report before Feb. 1, 1957, the statutory deadline fixed in an amendment to the Electoral Divisions Act assented to March 31, 1955.

The hold-up for the time being delays nominations of the political parties. It could snarl up chances of a provincial election in 1957 if the Government decides to have one.

The declared intention was that the next election would be under the new redistribution which will abolish multiple member seats in Winnipeg and St. Boniface and proportional representation voting in them and also eliminate the transferable voting system in single member constituencies.

All the parties know at present is that there will be 57 constituencies each to elect one member.

The three-member Commission created to make the redistribution is a permanent one consisting of the chief justice of the province, currently Mr. Justice J. E. Adamson, the president of the University of Manitoba, and the province's chief electoral officer.

It was instructed to make its first report to Premier Campbell on or before Feb. 1, 1957 and to make subsequent reports each tenth year thereafter to the president of the Executive Council.

The legislation instructed the premier to table it in the House forthwith if the Legislature was in session and if not, within seven days after the House opening.

It also prescribed a seven-to-four urban-rural ratio of voting strength allowing a 5% leeway, and using figures of the 1956 census.

The Commission was set up following a report of a special redistribution committee of the Legislature. The report stated telephone assurances had been received from Ottawa that the census figures would be ready early in October.

This information was given the House. Some preliminary figures have already been received on population figures of a number of Manitoba towns but not all of them.

Now comes word from Ottawa that the population by electoral divisions can't be ready before January, that they will be made available to all provinces at the same time, and that there never was any undertaking they would be ready any sooner.

Once they are received the work of the Commission will be largely a job of mathematical calculation to determine constituency boundaries. This may take considerable time. But before any final determination of area and boundaries of electoral divisions there have to be public meetings to hear representations from interested parties.

The Commission has to give reasonable public notice of the time and places of its sittings. This procedure is also prescribed by statute.

Unless the population figures can be made available sooner than Ottawa now says they can be, the report will be delayed beyond the deadline. A possible solution is an amendment to the 1955 legislation giving an extension of time.

In any case the area and boundaries of constituencies will be fixed by Act of the Legislature after consideration of the Commission report which it would likely accept although it isn't bound to do so.

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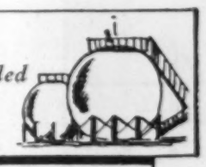

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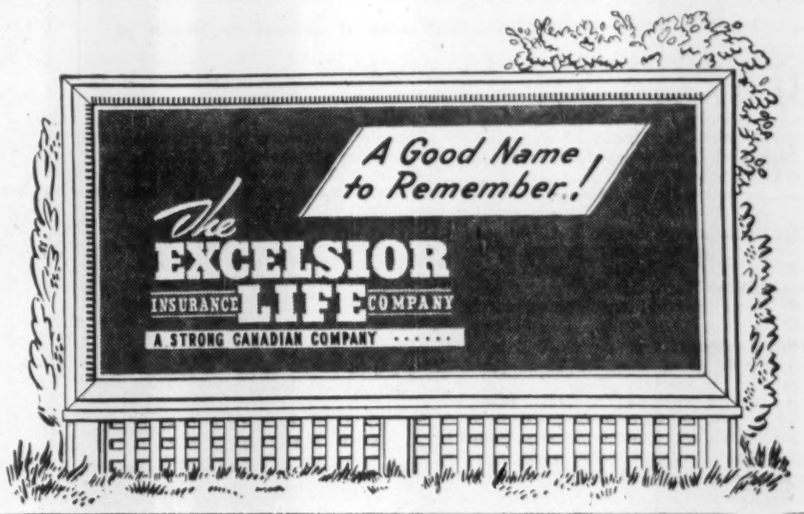

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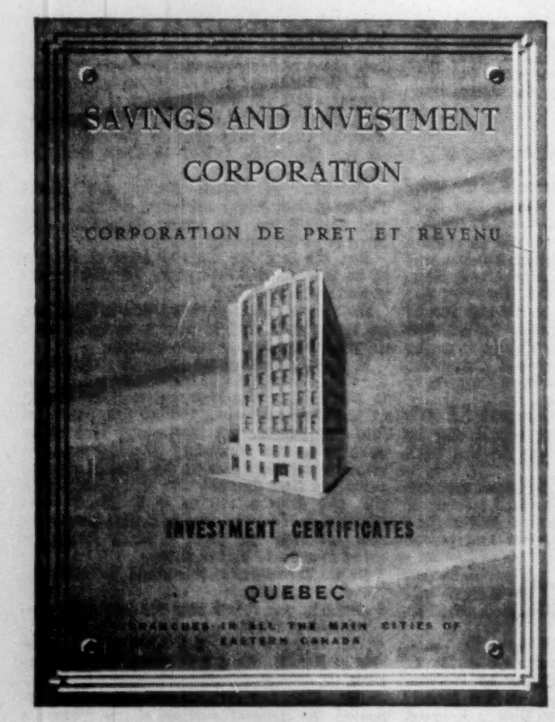

Company Report

P.R.M. INC., Wilmington, Del., net loss for 1955 was $692,472, compared to net profit of $150,253 in previous year.

Present board, upon election early in 1956, decided to acquire and distribute motion pictures for television and theatrical use.

Since April 1956 company has acquired all capital stock of **Associated Artists Productions, Inc.**, in exchange for 32,000 shares of its capital stock.

P.R.M. recently acquired the television rights for Popeye cartoons which it purchased for $2,250,000. It has also acquired **Warner Bros.** entire film library through 1949 for $21 million. Substantial portions of these acquisitions have been arranged through a $9 million bank loan and issue of $3,945,000 convertible debentures. Balance was arranged through cash and deferred payments, reports President George Gardiner.

Warner purchase gives P.R.M. all property rights. It acquired more than 750 features and over 1,500 shorts and cartoons. P.R.M. now owns over 1,000 features, 1,400 shorts and many hundreds of cartoons and half-hour episodes.

Company has entered into over $10 million of sales contracts since purchase of these libraries. This amount is receivable over approximately a three-year period. These were made on a cash basis and do not include partnership transactions or value of station time periods acquired as compensation for use of company's films.

Warner Bros. are handling the foreign theatrical distribution.

P.R.M. is establishing a literary rights department. Company plans to use merchandising rights and music rights where these were acquired, and radio rights where possible. It will also try to realize income from use of 16 mm. films for non-theatrical distribution, and for theatrical distribution in localities where 35 mm. service does not exist.

INCOME ACCOUNT

Years Ended Dec. 31:	1955	1954
Gross sales	$11,811,793	$8,401,337
Total oper. inc.	1,663,985	527,876
Less: Deprec.	381,045	332,378
Res. for taxes	*719,677	45,245
Loss on sale of plant, etc.	2,695,089	.....
Net profit	*692,472	150,253
Less: Com. divds.	170,807	136,582
Surplus for year	*863,279	13,671

*Loss or deficit.
*Credit.

Note—Net profit as shown in co.'s report was $147,518 in 1954, including profit and/or loss on equipment disposals.

Earnings per Share and Dividend Record:		
Common	d$2.03	$0.44
Paid	0.50	0.40

CONDENSED BALANCE SHEET

As at Dec. 31:	1955	1954
Cash	$3,172,469	$596,643
U. S. treas. bills	1,693,726	1,595,560
Accts., etc., rec.	2,144,326	959,120
Inventories	2,144,326	1,101,860
Total curr. assets	7,010,521	4,355,283
Prep. ins., etc.‖	.....	18,632
Inv. in Acorn Prod.	.....	350,000
Other assets	.....	177,182
Fixed assets*	.....	3,146,507
Total assets	7,010,521	8,047,604
Total curr. liab.	.....	307,578
Reserve	.....	500,000
Capital stock	341,512	341,512
Capital surplus	813,509	813,479
Paid-in capital	1,082,447	1,082,447
Earned surplus	4,772,950	4,922,468
*After depr. of	.....	3,308,043

‖Incl. in curr. assets in co.'s report.
▲Representing excess of market value over par value of stock dividends.

Working capital	7,010,521	3,997,705

PHONEY money from Formosa

Chinese Nationalists have a new twist in their psychological warfare. They are dropping from the air "silver" dollars that turn out to be aluminum discs urging mainland Chinese to join the Formosa forces.

While this money was phoney, real aluminum coins are widely used — in France and Italy, for instance. A fraction the weight of other metals, and perennially bright and shiny, aluminum pays off as small change. It also pays off for Canada, as an industry that converts raw materials and waterpower into purchasing power in the world markets.

ALUMINUM COMPANY OF CANADA, LTD. (ALCAN)

Want To Hire College Grads?

Here are predictions of the number of university graduates, by courses, likely to reach the job market over the next three years, as prepared by the Executive and Professional Division of the National Employment Service.

Never before have business and industry placed such a premium on a college degree.

Two years ago, the demand for university graduates of all courses was more or less in balance with the universities' output.

But right now there are more jobs than graduates in many fields of work.

Demand has outstripped supply—and will continue to do so for several years, according to employers.

Trends in demand for graduates are based on opinions gathered from a survey of employers, from professional societies and from industry requests for university graduates placed with NES over the past year.

Agriculture. Graduating class of 1957 will be about 250. Classes of 1958 and 1959 will be about the same — but even so will hardly keep up to increased opportunities for employment.

There are opportunities for agriculture graduates in business, government, teaching and also in putting to use in actual farming the knowledge obtained. Students interested in such study need not fear a lack of opportunity after graduation. Because a certain number of graduates return to their own or family farms, there are not enough remaining in present day classes to fill the needs of salaried positions.

Architecture. In recent years the annual output of graduates has been less than 100. Classes of 1957 and 1958 will be no more, and probably fewer. On present enrolment, it is expected that there will be between 150 and 175 graduates in 1959 and 1960.

The capacity of the five Canadian schools of architecture is a factor governing the output of graduates. Plans are being made to increase capacity. If these materialize and more students enrol, supply should be equal to demand in a few years.

At present, the Royal Architectural Institute of Canada and the schools say there are not enough graduates being produced to supply the needs of the profession. They also say that they know of no unemployed architects.

Arts. With less emphasis on specialization, arts graduates are finding greater favor with employers. Today many employers are asking for arts graduates for the simple reason they are not specialists and, given a good graduate, he can be taught any technical knowledge needed.

Modern business requires people who from their education have developed their cogitative, creative and imaginative powers, says Herbert H. Lank, president, DuPont Co. of Canada, and above all we want those who have demonstrated their ability to learn.

There are many fields in which arts graduates can find a place where they can be successful: advertising, personnel, real estate, sales, insurance, banking, general administrative work with any type of firm. Sales work especially, though often disregarded, offers great challenge and great opportunity.

For the next few years the numbers of arts graduates will run between 4,000 and 5,000. However, only 50% can be counted on for employment. Large percentage go on to study for a further degree. Many girl graduates marry.

Commerce and business administration. In 1956 there were over 700 graduates. In 1957 there will be about 800 and in both 1958 and 1959 roughly 900.

Supply will be inadequate to fill demand. Employers seeking commerce graduates may be forced to consider arts graduates who have majored in economics.

Main demand comes from industry (manufacturing and merchandising firms, public utilities), finance (trust companies, investment houses, banks) and accountancy (as articled students working toward C.A., C.G.A.)

Fields of specialization looked for by employers: market research, actuarial work, sales, statistics, advertising, public relations, accounting, purchasing, insurance underwriting.

Dentistry. There is a shortage — and one which is if anything getting worse year by year. This has been caused entirely by lack of teaching facilities. Schools' capacity is the same as it was when Canada's population was half as large as it is today.

Annual enrolment is 202, and after normal wastage, graduates number 175 per year. Some effort being made to add to facilities in Dalhousie, McGill, University of Montreal, Toronto. Universities of Manitoba and B. C. investigating possibility of starting schools.

It will take time to add to facilities and time for larger enrolments to complete training. Students contemplating dentistry can be told there is a great shortage. Main problem for them will be gaining entry to one of the schools.

Education. Shortage evident, but situation somewhat alleviated by immigration of teachers, special courses, larger enrolments. Before 1955 enrolments in colleges of education varied from 1,100 to 1,400. In 1955, there were 1,600 graduates, in 1956, 1,850.

There is an increasing demand for specialists which adds to the opportunities available to those with a university degree in education.

Engineers. In 1956, some 1,700 engineers graduated. By 1959, graduates should number 2,858.

Demand continues unabated. This year with 1,700 new graduates, there were job opportunities for around 4,000. Even with larger classes now in the schools employment opportunities for graduates are good and will continue to be so in the foreseeable future. We feel shortages are in no way exaggerated.

Forestry. Graduates in recent years have numbered less than 100. Classes of 1958 and 1959 may be only about 70 each.

Demand will not lessen, will probably increase. There are opportunities in lumbering, pulp and paper industries, as well as in federal and provincial governments. B. C. alone estimates it can use an average of 110 graduates each year over the next 20 years.

Geology. Number of graduates this year, 90. Number of NES orders for graduates, 218. Demand has been increasing, supply remaining constant at just under 100 per year. Enrolment in geology can safely be encouraged.

Household Science. Graduates over the next three years will be about 300 per year. Impossible for NES to fill all orders for household science graduates. Many marry, others do not go on to become dietitians which most employers are looking for.

Law. There will be between 600 and 700 graduates in law over the next three years. This is up from previous years, but can be easily absorbed. There is more room in private practices for lawyers. In addition, every year there are increasing opportunities in business and in all levels of government. Premium on specialists such as corporation lawyers, tax and constitutional law experts.

Library Science. Need for trained librarians is growing more quickly than are the numbers graduating from recognized schools. Output over the last few years has been between 60 and 70 per year. Demand is for more, though just how many more it is impossible to say since many libraries, knowing of the shortage, don't bother to put in requests for job applicants. Libraries say there are acute staff shortages. Enrolments should be encouraged; no fears about employment on graduation.

Medicine. Number of graduates in medicine governed by the capacity of the schools. With the exception of the four Atlantic provinces, the medical associations of each province say there is no shortage, or no pronounced shortage of doctors. However, there are opportunities in the medical profession for all the graduates which Canada can obtain. If medical schools obtain full enrolments, the situation should not be too bad. But if output decreases, we shall experience shortages.

Newspaper Work. Demand for journalism graduates greater than the output of the journalism schools (20 per year). Students with a degree in journalism will not have any difficulty finding suitable employment. And although journalism graduates are given a preference, some newspaper executives say liberal arts education provides a quite satisfactory background.

In addition to work as a reporter there are other opportunities in the newspaper field:

(Continued on page 36)

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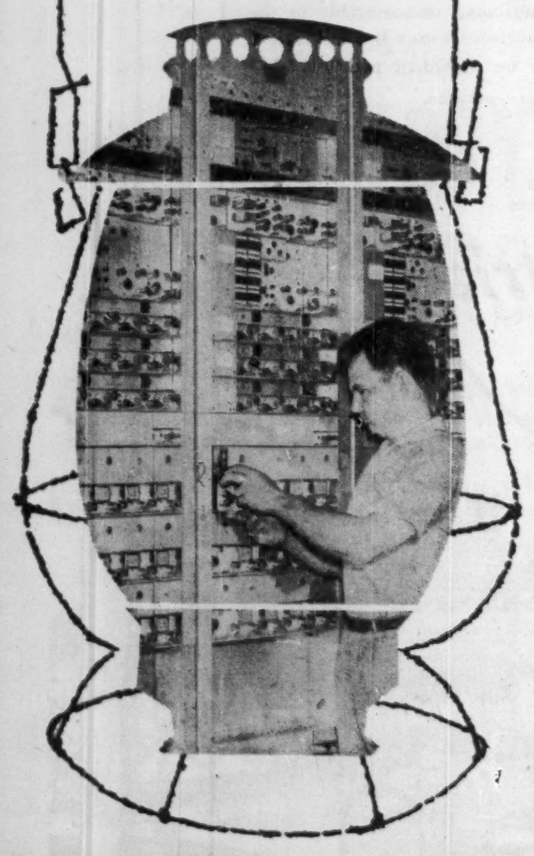

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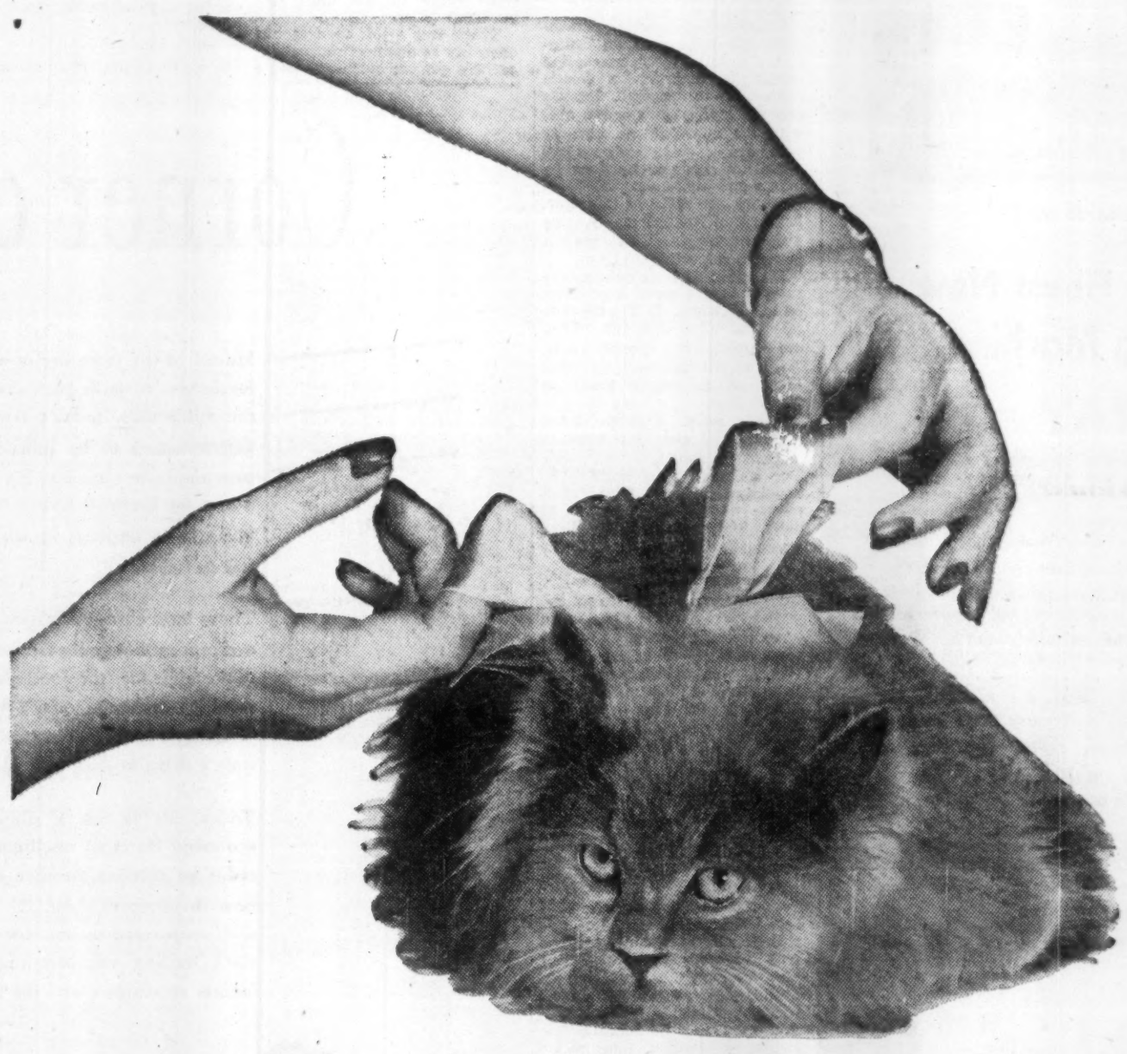

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ANNOUNCEMENT

ROYAL TRUST APPOINTMENT

ERNEST R. JONES

The appointment of Ernest R. Jones as Western Supervisor of Pension Trusts has been announced by The Royal Trust Company. Formerly a Trust Officer in the Pension Trusts division at Montreal, Mr. Jones will make his headquarters at Vancouver Branch. Creation of this new post, to supervise the western territory from Winnipeg to Victoria is necessitated by the continued growth of the company's Pension Trust business.

Your Company Policy Can Make or Break Men

- Who are the executives of tomorrow? The men with crew cuts, incipient ulcers, double-breasted suits?
- How are they developed? By motivating, inspiring and driving them?

To these questions, Moorhead Wright, assistant to the president and management consultant, **General Electric Co.**, answered directly "No". Speaking this week to the National Sales Executives Club of Toronto he stressed the need for a different attitude in management today. Here is a digest:

By MOORHEAD WRIGHT

American business is the dominant influence in the world today. The quality of the decisions we make is going to determine the course of the world.

Within the last 25 years has occurred the most radical social revolution in the recorded history of man. It began in the closing years of the 19th century when immigrants to this continent began to read newspapers.

The lower classes started an upsurge when the divine discontent, which is the quality of all humans, gave them a desire to improve their status. There is now no lower class. The individual has refused to be anyone's surf or slave.

People have changed. Today they are different. It takes more to satisfy them now than 25 years ago.

But have sales managers changed? I don't think so.

I attended a sales meeting two weeks ago that was very little different from one I attended 25 years ago. Yet today the sales problem is different. "Automation" is putting more pressure on sales than any other single factor.

The board of directors that invests $20 million in an "automated" plant expects marketing people to maintain a steady market for the product. But we are not going to achieve this with the approach we used 25 years ago.

It's not going to be done by bigger and better sales meetings, by more and more of the same. Bigger and better flags, dancing girls and trips to Cairo are not going to solve this problem.

It's not going to be done by the sales manager putting pressure on his salesmen. In 25 years the salesmen have changed. They are professional people now. They resent attempts to wind them up, to inspire them, to needle them.

They have deeper, inner drives today and they want to amount to something on their own account. They want to be developed. They don't want smart needlemen jabbing at them. They can smell fertilizer a mile off.

The Way to Develop Men

What, then, is the correct approach? At General Electric we have spent a lot of time and money on this question. One of the results has been the establishment of a $2.5-million institution in New York where top executives can learn the factors affecting the development of men.

What are these factors? They are simple, but they are not easy. Perhaps they are so simple that they are always overlooked. Here they are, here is what executives today have got to learn:

1. All development is self-development. Every year we send recruiters to Harvard Business School and tell them to bring back hundreds of engineers. Our recruiters are there with the recruiters of our competitors. And the poor bewildered kids who are at Harvard go from one recruiter to another listening to offers of working conditions, pension plans, recreational activities, bribes, plans to take them from the womb to the tomb, the cradle to the grave.

So the boy comes to work. And he has the attitude when he comes on his first day: "You fortunate people. You got me. Develop me."

But development is self-development. The motivation, drive, willingness to pay the price, is not something you do to a man. Instead you provide the opportunities and challenges for him to develop himself.

2. All development is individual. No man is like another man. No man is the same from one year to the next. There is no such thing as the average man.

Man is not something that you pass like a commodity through a rough screen. And no company should have a standardized, canned, boiler-plated method of developing people and apply it to all of them.

There should be as many development programs in a company as there are people. And each one should be tailor made for the individual.

No Crown Princes

3. The opportunity for development must be universal. Let there be no white-haired boys, no crown princes, no stereotypes, no separation of the sheep from the goats by managers sitting in judgment.

You know the management committees that say: "These are the men who have potential, get rid of the others."

Years ago our company had managers sitting as a committee selecting a stereotype for each job available. You know the stereotype then, with his crew cut and his incipient ulcer wrapped in a double-breasted suit. We said: "These are the high-potential men, these are the future managers. The others? Lay them off, they are not on the program."

I was a party to one of these committees in 1944 to make such a list. We were a solemn bunch with 143 names on our lis of Promising Young Men for the year. In 1954, I checked the list. Only 37% had actually gone on to be what we said they would be. We were only 37% right. It's very poor guessing when you are tinkering with a man's life.

You can be very wrong trying to pick promising young men. Abraham Lincoln would not have been on anyone's P.Y.M. list. And no program should exclude any man of 60 or over for development. When a man is 60 he has something very real to contribute to an enterprise. In his last years he can help develop the ones who are up and coming, the future managers.

Pay What is Earned.

4. There is a very important pivotal decisions in planning a man's development. Should he progress as a manager of the work of others or as an individual contributor? Should he be made a sales manager or permitted to pursue his profession as a salesman? We have gone wrong in the past because we did not recognize this problem.

We go get our star, individual salesman and make him sales manager. Too often we get a lousy sales manager and lose a good salesman. The personal satisfactions of managers and salesmen differ.

There was a job open at our company as engineering manager. We got our star engineer, a man with 143 patents under his belt, and made him manager. He had a nervous breakdown.

To make a good pivotal choice you must discuss with a man what his chances are of being a good sales manager. You must suggest that a sales manager has an entirely different source of satisfaction. He must renounce his own personal desires and derive his satisfaction from seeing his boys perform. If he doesn't, he won't be a good sales manager.

You must also have built into the structure of your company and your sales office a salary structure that will permit you to pay a salesman according to his contribution, without being forced by economic pressure to give him the title of manager in order to pay him the money he deserves.

There should be circumstances in which an individual salesman gets paid more than the sales manager for whom he works. Not many cases, but some.

Management is a profession in itself. Selling is a profession. A man who is a professional salesman and is trained to be sales manager changes his profession. You would not ask a doctor to change his profession to a dentist.

Think in terms of that. Should he progress as an individual or go into a managerial position?

5. 90% of a man's development is due to what happens to him day to day in his job. It's the relation of a man to his boss. This is a strange fact.

In the course of our study we sent outside interviewers to 300 successful managers in G.E. They asked them what was the most important thing in their development through the years. And 90% said "I got my greatest development when I was working for so-and-so in so-and-so."

They traced, in the main, their development not to any special education or outside activity, but to their relationship with their own manager. They felt they had developed under that kind of management. Or they felt they had suffered under that kind of management. We have 43 officers in our company and 12 never went to college.

No company has to spend a lot of money to research their

(Continued on page 38)

Moorhead Wright, *assistant to the president and management consultant, General Electric Co.*

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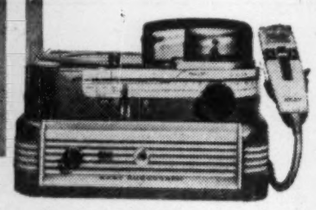

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Times have changed "down on the farm" however, and, although the farmer may have moments of nostalgia for "the good old days", he certainly wouldn't exchange today's farming methods for yesterday's backbreaking toil—when his job was truly a dawn-to-dusk struggle.

Today, his is not a simple "sow-and-reap" economy. He is an intelligent businessman. By radio he receives weather reports and knows how to interpret them. He is fully conversant with crop rotation, soil conservation, scientific stock feeding and breeding, local and world market conditions, and the efficient application of electricity to make his work easier—his life more comfortable.

The tremendous expansion of rural electrification in recent years has enabled countless thousands of farmers to harness this clean, abundant supply of power to improve methods and increase production.

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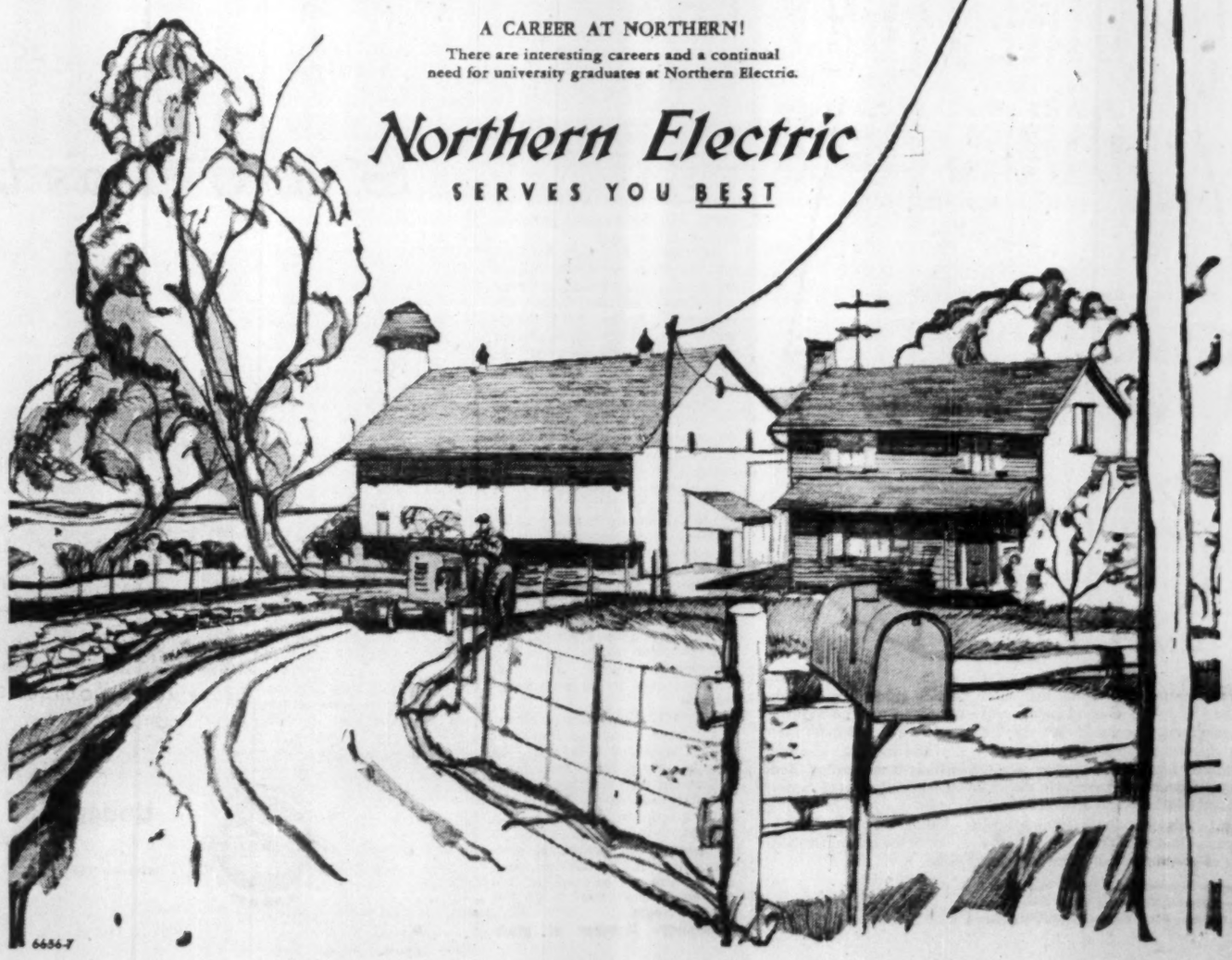

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Major Cities Show New Trends To Apartments, Schools, Offices

The record of building permits issued by representative cities across Canada shows that the building pattern is changing rapidly but volume is being maintained and often exceeded. Here are some of the trends which city developers and builders are now having to meet:

- There's a marked trend among city dwellers toward apartments.
- Downtown business is demanding the most up-to-date accommodation, with air-conditioning a must.
- Industry, in our biggest cities, shows a definite move toward the suburbs.
- New schools are going up at a record pace to house our increasing pupil population.

Estimated value and number of building permits in city centres across Canada have maintained a fairly even pace this year as against 1955.

Declines in some centres have been noted but few of a substantial nature and in most cases the causes have been due to lack of suitable sites and delay in other work through bad weather as well as the general complaint of financing restrictions.

In other cities, notably in Western Canada and Ontario, there have been substantial rises over last year. Vancouver, presently, is more than 45% ahead of the same period last year in the value of permits granted while in Edmonton the building dollar score is nearly 18% in front of 1955.

An outstanding feature of the progress in Edmonton has been a surge in commercial building which, to date this year, has passed the $13 million level as compared with a mere $6 million at this time last year. Also interesting is the lead which residential building currently holds over last year's figure in that category. For the period, it represents just over $29 million in value as against slightly more than $23 million in the same period last year. The main increase was in permits secured for new dwellings and here the comparative figures for eight months were: 1956 — $27.6 million; 1955 — $22.0 million. There has been a slight decrease in the number of permits issued for apartment building.

Where Regina Scores

In direct contrast, Regina reports a drop in value and number of permits for new houses but an increase in those for multiple home units including apartments. In the first seven months of this year, the city had issued 443 permits for new dwellings worth $4.8 million compared with 623 worth $5.7 million last year. But value of permits for multiple housing, though not a large factor in the general total, were up in value by around 78%. Number of permits out for commercial construction were down a little but the value was up. For the period this year in this category, 66 permits worth $2.2 million were issued as against 73 permits worth $2.0 million last year.

Regina has also issued more permits for school, church and other institutional building this year but the value is down by around 40%. Value of permits issued for public buildings is more than four times the 1955 figure.

Like many other of Canada's smaller towns, Moose Jaw reports a brighter picture of building activity this year than last, and that despite a fall-off in new house construction. While housing construction permits for seven months were down 15%, the value of all building permits was up 5.5%.

Toronto Apartment Surge

In building permits, there is also big-time news from Toronto. Hotels, apartments and offices play the big role here, more or less in that order. Presently, building permit values are running about 57% ahead of last year. The Building Commissioner's department is optimistic that this year will see the capping of the previous high dollar record of 1954's $86 million. The value total of permits at $76 million was off somewhat last year.

But up to the end of August last, value of Toronto permits for 1956 was $52.8 million with four months to go. In July, the total was $9 million and last month just over $8 million. The score in succeeding months is not expected to fall sharply.

Behind the apparent building surge in Canada's great city, there is a tremendous increase in apartments. This follows logically on two bases. One is the fact that room for individual dwellings in the city gets more and more restricted each year. The other is the demand for homes within reasonable reach of the central part of the city and the desire of the civic authorities to meet that demand so far as they can.

The result is that to an increasing extent, older residential sites are being cleared of individual homes and apartment blocks erected in their places. Proof of this lies in the fact that out of the 1956 eight-month total of $52.8 million, permits for apartment building accounted for about $20.6 million. In permit value for apartments, that represented an increase of $6.1 million over July and August.

Super-Luxury Suites

The apartment trend is one that has been going forward for the past two years and ranges from suites for moderate income groups at around $120 for two bedrooms right up to a recent surge of super-luxury units ranging to nearly $400 monthly in rents for four bedrooms. Another interesting development is a small but definite trend toward building apartment blocks with suites for sale.

Also behind the increase is a tremendous development in Toronto of hotel building. It's reckoned that hotel building presently going forward in the city represents a value of around $90 million, much of it started last fall and this spring.

Offices are a third major item in the building record. The development of University Avenue as an outstanding commercial centre and the building and conversion of the latest type of office accommodation downtown has featured in this.

Houses In Hamilton

In Hamilton, the emphasis continues to be on houses. That is one of the major Canadian centres where new home starts show little sign of declining this year and the building permits issued by the civic authorities back up that statement.

Last month, brick dwellings represented $1.4 million in permits out of a total value of $3.3 million, and in July, the same category claimed $1.2 million out of $4.5 million. Apartments represented a total of only $161,000 for the two months.

But the Hamilton picture shows other interesting facets. In July, for instance, there was a tremendous upsurge in store building and alterations. It accounted for just over $2 million but fell back last month to just over $70,000.

An important and continuing contribution is that involving industry. Last month permits for factories, workshops, warehouses, etc. accounted for $963,870 and in July the total was just under $500,000.

Fredericton Sees Record

In New Brunswick, the provincial capital of Fredericton is breaking all records in the value of building permits. Building Inspector R. H. Colwell expects this year to outstrip the previous record year of 1953 by a substantial margin. In 1953, building construction reached a record high of close to $3.1 million.

Last month, the permit value total rose to $3 million with the addition of an estimated $344,000 during August. Last month's total was more than $100,000 over the August 1955 total.

Largest in value of 36 permits issued last month was for $171,344 addition to Albert Street school and two others were for a warehouse and a service station. There were ten permits for alterations and repairs.

Mr. Colwell notes that the emphasis this year in Fredericton is on commercial and educational building. School and supermarket building permits in July totaled $700,000.

Permits in Last Three Months

Here are the numbers and value of building permits issued in each of the last three months in a representative selection of Canadian cities:

	August		July		June	
	No.	Value ($ Mill.)	No.	Value ($ Mill.)	No.	Value ($ Mill.)
Halifax	317	0.8	320	0.7	436	1.5
Lachine	79	0.7	...	..	47	0.4
Montreal	414	7.9	386	5.7	510	10.2
Hamilton	869	3.3	911	4.5	841	3.6
London, Ont.	104	1.1	78	0.3	106	0.8
Toronto	730	8.3	664	9.3	677	7.9
Fort William	...	0.7	87	0.6	...	0.3
St. Boniface	174	1.5	161	1.5	162	1.7
Regina	326	2.7	269	1.9	260	3.1
Lethbridge	63	0.3	87	0.6	70	1.0
Edmonton	935	7.1	1,063	11.3	1,144	11.5
W. Vancouver	...	0.8	...	0.6	...	0.8
Victoria	694	0.6	654	1.5	659	0.6
Vancouver	...	..	493	6.3	681	10.9

1956 Permits Compared With '55

These figures represent the cumulative totals of building permits issued in some of our major cities in the past eight-month period as compared with the same period in 1955:

	Jan.-Aug., 1956		Jan.-Aug. 1955	
	No.	Value ($ Mill.)	No.	Value ($ Mill.)
Halifax	2,481	7.5	...	..
Montreal	3,647	84.0	3,576	97.6
Hamilton	...	23.3	...	21.8
Toronto	4,657	52.8	5,536	33.5
London	622	5.0	696	7.3
Regina	1,391	14.1	1,265	16.3
Edmonton	5,617	50.4	5,046	42.8
Victoria	4,912	5.7	4,586	6.6

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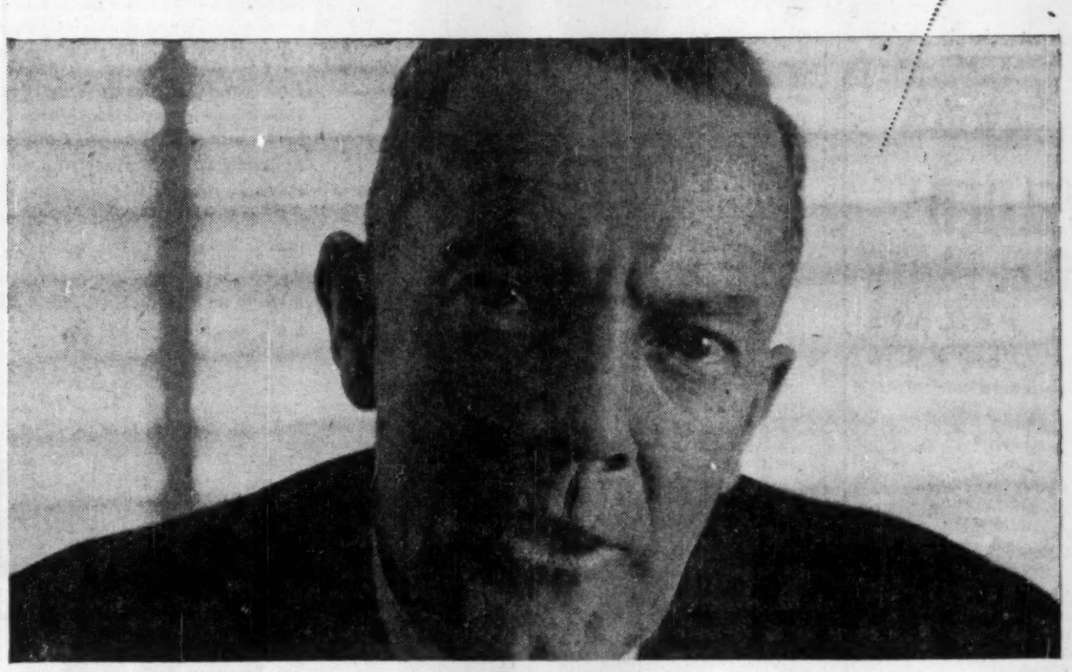

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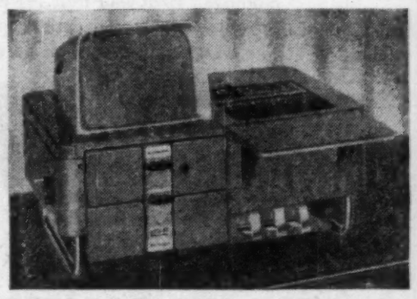

Here—combined and *complete* in a single unit—is the microfilming equipment you *can* afford. For the unique Micro-Twin that converts from recording to reading and back again—at the mere flick of a knob—actually costs substantially *less* than any other *up-to-date* microfilming system.

It records as fast as it can be fed—by hand or automatically. You can photograph documents front and back simultaneously or one side only, as you prefer. You can even make full-size facsimile prints of any document image right from the Reader—and actually develop them in just a few minutes without a darkroom.

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• • •

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How CNR Pulpwood Car Works

New Freight Car Will Carry Industry's Rich Harvest

See Page 51

A new type of pulpwood car developed for rail traffic can haul 70% greater loads at faster speeds.

The Canadian National Railways' development is important. The reasons: pulpwood traffic is a growing business because of the increasing demands for the rich harvest from the pulp and paper industry.

The car can handle about 29 cords of rough green spruce, balsam or jack pine, and about 25 cords of hardwood, compared with 17 cords on the flat car now used.

Test runs on the car, still considered experimental, have resulted in the following tentative conclusions:

- The car is practical for both manual and mechanical loading.
- Times for loading the new car equal or better the loading times for a racked flat car.
- Mechanical loading of the new car is faster because it eliminates "bumping" — a process that lines up the log ends for safe movement on a racked flat car.
- Wood either manually or mechanically loaded on the new car can be moved fast safely in high-speed freight trains.
- When the car is loaded with all logs at right angles to the length of the car a pusher blade can be practically employed in unloading.
- When the wood has been loaded parallel to the length of the car, it can be partially unloaded by a roll-out method, reducing the amount of wood that must be manually handled.

Volume for railways

The importance of the traffic can be seen in 1955 operations of the CNR. It handled 4,348,733 tons of pulpwood, some of the traffic originating but not terminating on CNR lines and vice-versa.

Some 80% of that which did originate on CNR came from Quebec and Ontario. Of that which terminated at CNR points —delivered either to pulp mills, or other forms of transport— some 70% terminated in Quebec and Ontario.

All Canadian railways originated a total of 5,834,202 tons of pulpwood — derived in these ways: Newfoundland, 518,144 tons; Prince Edward Island, 7,229 tons; Nova Scotia, 231,320 tons; New Brunswick, 775,590 tons; Quebec, 1,878,671 tons; Ontario, 1,955,175 tons; Manitoba, 333,994 tons; Saskatchewan, 72,249 tons; Alberta, 42,752 tons, British Columbia, 19,078 tons.

Total tonnage terminated in Canada was 4,287,121 tons. It was divided among the provinces in this way: Newfoundland, 519,268 tons; P. E. I., 50 tons; N. S., 175,977 tons; N. B., 261,104 tons; Quebec, 1,543,242 tons; Ontario, 1,667,597 tons; Manitoba, 118,444 tons; Saskatchewan 227 tons; Alberta, 396 tons; B. C. 816 tons.

The problem facing the CNR developing the pulpwood car was to get a design which would reduce the over-all cost of moving pulpwood from the woods to the mill, treating such movement as a portion of the manufacturing process. The design had to meet certain very general specifications:

—A capacity which would take maximum advantage of the economies of size.

—A design which would permit safe use with both rough and peeled wood in multiple track territory with reasonably high train speeds.

—A car adaptable to mechanical as well as manual loading and unloading.

Solving the problem

Investigation of the problem indicated the car should take the form of an open-top crib with movable sides. In order to put a prototype car in service, for test purposes, with the least possible delay, it was decided that the crib should be designed to fit a standard 52 ft. 6 in. by 10 ft. 2 in. flat car.

Here are the general details: Dimensions — inside length, 50 ft. 10 in.; average inside width, 9 ft. 6 in.; inside height, 9 ft. 6 in.; extreme height above deck, 9 ft. 10¼ in.; height of load, 8 ft.; width out to out 10 ft. 6 in.; capacity, 138,000 lb. Maximum load, 140,700 lb.

Based on rough green spruce, balsam or jack pine weighing approximately 4,700 lb. per cord, it is estimated the car will handle 29 cords. The capacity would reduce to approximately 25 cords of hardwood.

The crib consists of two very sturdy steel end frames and skeleton steel side frames, fitted with four 9 ft. 6 in. sliding doors each side. The ends, side frames and doors have an inside skin of heavy duty chain like wire mesh to aid in retaining a load.

The doors, 9 ft. 6 in. wide by 8 ft. 8 in. high, are hung from the top only on a slide bar. The doors are so arranged that the end door can be slid in behind the centre door or vice-versa, thus two doors on each side can be opened at any one time giving a total side opening of 19 ft. for loading or unloading. Besides the sliding feature, the doors can be swung out from the bottom to clear the load or to allow part of the load to roll off without handling at the unloading site.

The doors are latched with a crank and pin arrangement, each door being operated independently from the end of the car. This provides a safety feature at unloading points since the men unloading the car clear the door when it is first released and thus are in no danger of being hit by falling sticks.

Two loading crews

The manual loading of the car is much the same as with a box car. With the door nearest the end of the car open, wood is stacked in the 6 ft. end section as in a box car, when this section is fully loaded, wood is then piled in the doorway section similar to the loading of an end racked flap. When these sections are fully loaded the position of doors is changed exposing the centre 19 ft. of the car when the piling is again done as with flat car. Due to the length of the car and the arrangements of doors, it is possible to work two crews to each car, one from either end. The two-crew operation would work exceptionally well at sidings giving access to both sides of the car. With loading completed the doors are closed and latched and the car can be moved over single or double track lines in high speed trains quit safely.

Before starting mechanical loading the car must be checked to see that all doors are properly closed and latched. The car can then be loaded mechanically with any type of equipment capable of reaching over the sides of the car. With the exception of the three cross ties which are so positioned to give the least possible interference to mechanical loading, the top of the car is completely open for convenient use of orange peel, grapple, or sling handled wood.

Unloading can be done manually, mechanically, by gravity or combination of these.

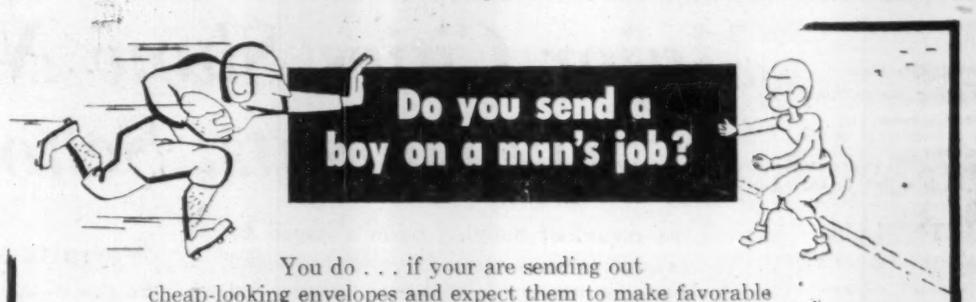
Manual unloading—by reversing the procedure used in manual loading the cars can be unloaded as presently done by box cars. However, due to the larger doors, four to a side, this operation should very closely approximate the manual unloading of a flat car.

Mechanical unloading—can be done with an orange peel or grapple over the top of the car or by opening directly opposite doors the wood in the door sections can be pushed off as is done with flat cars, leaving only the two end pockets and the odd stick missed by the pusher blade to be unloaded manually.

Gravity unloading — if with mechanical loading the sticks are lengthwise with car, a good portion of the load will roll off when the doors are released. The wood in the end pockets and the small amount of wood which does not clear the car has to be handled manually. The amount of manual loading could be reduced by having the outer rail elevated so as to tilt the car toward the conveyer trough thus allowing all the wood in the door sections to clear the car with only the end pockets to be handled manually.

The CNR believes that with its greatly increased capacity over existing cars and pulpwood service, the safety feature of completely protecting the load in transit and the fact that it is adaptable to either mechanical or manual loading and unloading, the car should fulfill the demands of the pulp and paper industry for special pulpwood car.

The "end-racked" flat car meets many of the necessary requirements but its operation in Canada is said to have shown a very poor performance safety-wise. The railways are put to heavy expense for rebuilding loads, involving not only the labor cost of unloading and reloading but also the set-out expense and loss of car days. As a result of its accident threat, the Railway Association of Canada published instructions calling for top-side protection for all pulpwood loads on racked flat and gondola cars. These instructions brought forth complaints from the shippers since the cost of labor and material and time taken to cooper seal the car, offset the anticipated savings from use of racked flat.



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250 BOWIE AVENUE: TORONTO 10, Division of Canadian Pad & Paper Co. Ltd.,

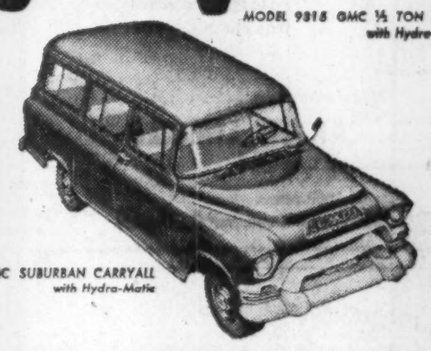
Morgan's had a problem!

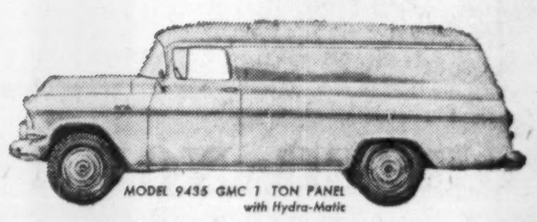
Morgan's of Montreal had a problem. It was caused by three factors; a heavy volume of deliveries, congested traffic conditions and the need to carry all shapes and sizes of merchandise to and from their four stores.

However, GMC was the answer to Morgan's problem . . . with Standard Units. Here's how it was done. Morgan's chose 4 Standard Models— ½-ton model 9315 panel, 1-ton model 9435 panel, the M350 and FM350 to handle *all* their transport needs for home delivery, warehouse to stores, shipping runs. Their personnel transport is smooth-running nowadays, too, thanks to a GMC model 101 suburban.

One important feature resulting in increased driver efficiency, lower maintenance costs—and lower personnel turnover—is Hydra-Matic transmission on all units. To sum it all up, Morgan's had a serious problem— GMC was the right answer.

MODEL 9315 GMC ½ TON PANEL with Hydra-Matic


MODEL 101 GMC SUBURBAN CARRYALL with Hydra-Matic


MODEL 9435 GMC 1 TON PANEL with Hydra-Matic

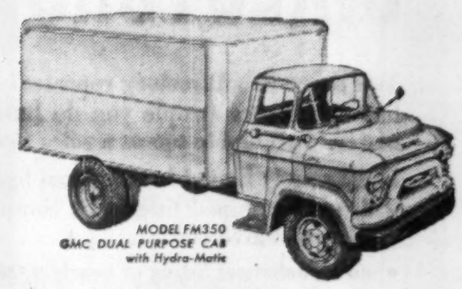
Door to door, city or suburbs, large loads or small, these 5 GMC models proved they could handle everything, easily and economically

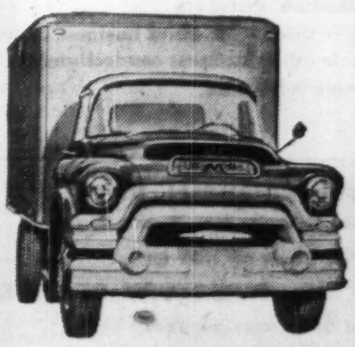
GMC was the answer!

Yes, GMC with Hydra-Matic was the answer to Morgan's problem . . . and GMC can be the answer to *your* problems, too. Whatever your trucking job— whatever the payload or the problem—GMC can handle it. Because GMC has the only truck line that handles every trucking need, with the world's widest range of models, transmissions, engines and rear axles.

GMC offers GVW's from 5,000 lbs. to a whopping 59,000 lbs; 12 V-8 or 6 engines ranging from 140 to a tremendous 225 horsepower. With standard and automatic transmissions and virtually no limit to the rear axles and ratios available, GMC offers a truck to serve any industry, match any load requirement.

No matter what your trucking problem may be, there's a GMC truck to solve it—quickly, efficiently, dependably, economically.


MODEL FM350 GMC DUAL PURPOSE CAB with Hydra-Matic


MODEL M350 GMC CAB AND CHASSIS with Hydra-Matic

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'Vitaminized' Apple Juice Equivalent to Citrus Now

Canada's apple canners will vitaminize 95% of the country's three-million-gallon apple juice pack this year in an effort to jack up the sagging apple industry by boosting juice consumption.

They'll add Vitamin C, the anti-scurvy vitamin, essential for the growth of all forms of connective tissue. Vitamin C content of the resultant juice will be equal to that of citrus fruit juices.

Cans of the Vitamin C juice will be marked "fortified" or "vitaminized" in large, bold letters.

Cheapest Vitamin C Source?

Juice	Vitamin C Content (mg/100cc) Average	Range	Min. Daily Requirement Fl. oz.	Cost (¢)
Grapefruit	31	14-47	3.49	1.77
Orange & grapefruit	37	23-48	2.85	1.85
Orange	44	31-61	2.40	1.75
Tangerine	24	15-32	4.41	2.85
Lemon	34	27-46	....	....
Tomato	16	9-26	6.61	4.00
Pineapple	8	2-16	13.23	9.06
Apple (plain)	2.2	.5-13.6	48.00	23.00
Apple (fortified)	35	....	3.02	1.97

The move is the result of individual decisions within the canning industry (i.e., there's no national association involved) plus a certain amount of "suggestion" from the Federal Department of Agriculture.

Employed will be a government-patented process. Government inspection will ensure that the fortified juice has a Vitamin C content of at least 35 mg. per 100 cc at any time within 12 months of the date of packing.

Vitamin C content of ordinary apple juice ranges from ½ mg. to 13.6 mg. per 100 cc; that of citrus fruit juices ranges from nine mg to 60—with orange juice averaging about 44.

In the first years of the war, it was obvious that importation of citrus fruit juices from the U. S. — up until that time a major source of Vitamin C in the Canadian diet—would have to be curtailed.

A process for vitaminizing apple juice was worked out and patented by the government so that it would be available to all processors. During the war, the supply of cans available was restricted to the vitaminized product; thus, the full Canadian pack was a vitaminized one.

After the war, restrictions were removed and, under the pressure of competition, canners for several years stopped altogether the fortifying of apple juice. In the last two years, a drop in the price of the vitamin, plus a growing demand for foods rich in Vitamin C, caused several canners to begin again to fortify their apple juice.

(One canner, **Canadian Vinegars Ltd.**, had trouble selling vitaminized juice in 1954-1955 until all their plain apple juice was gone; however, the company vitaminized its entire 1955-56 pack and is selling it without difficulty.)

Vitamin C, otherwise known as ascorbic acid, is one of the essential elements in an adequate human diet. It's the "growth" vitamin necessary for the formation of body cells in muscles, bones and teeth. Scurvy, bane of early explorers and oldtime sailors, is merely a vitamin deficiency disease—deficiency of Vitamin C.

It has one peculiarity, unusual among the salts, vitamins and minerals of the human diet—it can't be stored by the body. Thus, for adequate health, you have to eat or drink daily something containing Vitamin C. Estimates of the human requirement of Vitamin C vary; the U. S. National Research Council recommends 75 mg daily for men, 70 for women; 90 for boys between 13 and 15; 100 for youths 16 to 20; 150 for lactating women.

The Department of Health and Welfare recently published the results of a survey on the Vitamin C content of canned fruit juices available in Saskatchewan, Manitoba and Western Ontario. Using the DHW averages as a starting point, a spokesman for a group of apple juice canners worked out a set of figures on the costs of various juices which would supply minimum daily requirements of Vitamin C.

From the figures, apple industry officials argue that the most economical source of Vitamin C available in canned juices in Canada is vitaminized apple juice, and that it is the only low-cost, uniform-constitution, continuous-supply source of the vitamin which is native to the country (they exclude tomato juice from this definition because amounts of Vitamin C therein vary).

Apple production in Canada varies considerably from year to year, mainly on account of the weather (since 1946 production has ranged between 11.9 and 19.2 million bu.). But, in any year, growers say, a "substantial" share of the crop is left on the trees or rots on the ground for lack of consumer demand.

It makes the game greater...

A FLASHING display of broken field running can set the stands roaring. Watch that nimble back race around end into the clear—it's spectacular! More and more, Canadians have time to enjoy themselves . . . and they've got their eyes on football. Getting in on the thrills?

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Improved Ethylene production offered by Canadian Kellogg

Pyrolysis process gives better yields and higher selectivity whatever the feed stock

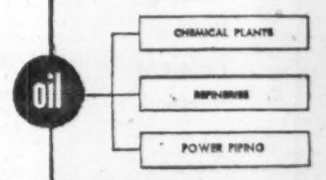
PROVED HIGH ON-STREAM EFFICIENCY AVERAGES 95%

Ethylene demands are exceeding the limits of the existing supply produced by simple recovery from refinery gases. The engineers and contractors of one of Canada's first conventional type ethylene recovery plants, Canadian Kellogg, now offer a unique process for the manufacture of ethylene that holds many advantages over conventional systems and guarantees optimum yields and purity from economically-available feed stocks. The key is the steam-pyrolysis process developed by Kellogg and used with great success in England and on the Continent. The results of this process have been marked by excellent yields of high purity olefins, generally higher than can be obtained by conventional cracking. Equally important is the remarkable, high on-stream efficiency which permits continuous plant operation at high conversions.

Canadian Kellogg invites interested firms to review the considerable cost data on ethylene manufacture, based on pilot plant and actual commercial production, that has been accumulated.

These are a few of the companies with whom Canadian Kellogg has worked—

Polymer Corporation, Limited
Imperial Oil Limited
Canadian Oil Companies Limited
British American Oil Company Ltd
Canadian General Electric Company Ltd.
McColl-Frontenac Oil Company Limited



Our affiliates, T.I.W. Western, Ltd., Edmonton, Alberta, with their modernized and expanded plant facilities are well qualified to look after your fabrication needs.

THE Canadian Kellogg COMPANY LIMITED, TORONTO, ONTARIO

Company Reports

To assist readers in appraising and comparing company financial statements, The Financial Post has a uniform method of presenting corporation accounts. Variations from the companies' published reports are footnoted.

Metals

CHROMIUM MINING & SMELTING CORP., Sault Ste. Marie, Ont., reports a consolidated net profit of $1,021,303 in the year ended April 30, 1956, a sharp improvement from a loss of $1,650,652 in the previous year.

Although sales and earnings were maintained at satisfactory levels in the first two months of the current fiscal year, a one-month strike in the steel industry is affecting operations.

Operations at the chrome ore mine in Southern Rhodesia have been restricted because of an acute shortage of railway cars to move ore to port.

A wholly owned subsidiary has acquired all outstanding shares of **Exothermic Alloys Sales & Service, Inc.**, which previously operated as an independent, exclusive sales agent and now acts as a sales subsidiary. This is in line with changes in policy aimed at assuming direct control over sales to help in development of new markets.

Efforts to enter the low carboned ferrochrome market in the U. S. have proved successful with sales increasing substantially. Demand for other ferroalloy products has continued to develop and further efforts are designed to expand sales and increase diversification of products.

CONSOLIDATED INCOME ACCOUNT

Years Ended Apr. 30:	1956	1955
Oper. profit	$2,625,886	*$290,342
Less: Interest & bank charges	343,770	302,897
Emp sav. & pen. fd.	129,327	3,386
Prov. for doubt. acct.	.....	85,000
Net oper. profit	2,152,789	*681,625
Less: Depr. & amort.	709,632	371,359
Pat. rts. & dev. exps. w/o	159,275	159,275
Loss sale of raw mat.	.....	160,322
Costs of experiments	.....	95,087
Bond & note int.	139,600	132,843
Can & U.S. taxes	†122,979	49,636
Net profit	1,021,303	*1,650,652

*Loss or deficit.
†After credit of $498,000 resulting from application of prior losses.

CONDENSED CONS. BALANCE SHEET

As at Apr. 30:	1956	1955
Cash	$414,288	$376,565
Accts. rec.	2,543,419	1,848,320
Stores & supplies	3,110,091	2,155,826
Prod. in proc	3,977,163	3,214,283
Total curr. assets	10,044,961	7,593,994
Notes receivable	33,998	.....
Prep. exp. & def. chgs.	‡84,545	592,720
Inv. & advances	1,300	1,500
Mine:		
Cls., dev., bldgs.	1,127,513	1,082,788
Mine explor., etc.	.....	94,820
Smelter:		
Plant, equip., etc.†	4,703,052	4,597,609
Preprod. exp.	.....	*630,340
Research, pat., etc.‡	704,202	827,302
Total assets	16,689,771	15,423,073
Due bank	7,083,766	7,823,317
Note pay.	2,400,000	2,400,000
Accts., etc., pay.	3,838,867	2,219,810
Taxes pay.	215,484	118,426
Total curr. liabs.	13,538,117	12,560,553
Funded debt	382,000	382,000
Capital stock	5,001,000	5,001,000
Deficit	2,231,346	2,536,480
†After deprec. of	4,433,078	3,740,015
‡Less amt. w/o of	unstated	unstated
•Included in curr. assets in co.'s report.		
*Less amount written off.		
Working capital‡	3,493,156	4,970,559

‡Excess of curr. liabs. over curr. assets.

Finance

ATLANTIC ACCEPTANCE CORP., Hamilton, net profit for the year ended June 30, 1956 was 21.8% higher than for previous year ($23,536 against $19,324).

Expenditures for completed and future expansion have reduced earnings, but such outlays are necessary for planned growth, reports President C. P. Morgan. Company reduced total expenditures to 83% (86% in previous year) of total revenue which amounted to $215,031 ($191,940).

Business on hand at year-end amounted to $1,403,867 ($1,054,052), a 33% gain.

Atlantic in June 1956 purchased capital stock of **Talbot Finance Co.**, St. Thomas, Ont., a wholly owned subsidiary formed during year. Atlantic is conducting business from its own offices and those of Talbot in Hamilton, Ottawa, St. Catharines and St. Thomas, Ont. A survey for additional offices is being made.

Atlantic's progress in its three years of operation appear to justify hope of still further improvement, it says.

CONSOL. INCOME ACCOUNT

Years Ended June 30:	1956	1955
Net earnings	$83,308	$67,740
Less: Depreciation	3,307	1,981
Debenture int.	16,568	.....
Other interest	25,604	39,235
Fin. exp. re amort.	893	.....
Income tax	13,400	7,200
Net profit	23,536	19,324
Less: Pref. divds.	16,500	14,417
Surplus for year	7,036	4,907
Earnings per Share and Dividend Record:		
Preferred	$1.57	$1.29
Paid	1.10	1.10
Common	0.14	0.10
None paid.		

CONDENSED CONS. BALANCE SHEET

As at June 30:	1956	1955
Cash	$35,295	$35,345
Rec'les less res.	1,403,867	1,054,053
Inventory	263	4,550
Total curr. assets	1,437,423	1,093,948
Prepaid exps.*	1,109	1,280
Invest. in subsid.	82,890	.....
Cash re pf. sh. redempt.	230	118
Other assets	33,345	32,800
Fixed assets†	11,029	7,076
Total assets	1,566,028	1,135,222
Bank advances	675,000	340,000
Pay. re subsid. shs.	81,390	.....
Accts., etc., pay.	50,611	61,742
Inc. tax	10,750	2,800
Total curr. liab.	818,251	404,542
Deferred income	99,343	89,282
Long-term debt	300,000	300,000
Capital stock	330,000	330,000
Res. for pf. sh. redemp.	230	118
Earned surplus	18,204	11,280

*Included in curr. assets in co. report.
†After deprec. of 7,059 3,752

Working capital	619,174	689,406

JOHN PALMER CO., Fredericton, net profit for the year ended April 30, 1956 was $27,338, 17.5% higher than net profit of $23,273 in previous year.

Sales were about 5% ahead and outlook for current year is promising, reports President Water H. Vail.

INCOME ACCOUNT

Years Ended Apr. 30:	1956	1955
Sales	$456,830	$434,750
Net earnings	50,056	38,039
Less: Depr.	5,372	3,306
Income taxes	17,145	11,460
Net profit	27,338	23,273
Less: Cl. A divds.	13,750	13,750
Cl. B divds.	10,625	10,000
Surplus for year	2,963	*477

*Deficit.

Earnings per Share and Dividend Record:		
Class A	$0.99	$0.85
Paid	0.50	0.50
Class B	0.54	0.38
Paid	0.42½	0.40

CONDENSED BALANCE SHEET

As at Apr. 30:	1956	1955
Cash	$168	$50
Accts. rec. less res.	150,119	154,238
Inventories	63,441	43,135
Total curr. assets	213,728	197,493
Misc. assets	3,380	4,421
Fixed assets*	183,638	182,356
Total assets	400,746	384,270
Bank loan & o'draft	41,231	28,923
Accts., tax. pay.	30,664	33,652
Total curr. liab.	71,895	62,575
Appraisal credit	155,762	155,762
Capital stock	92,500	92,500
Surplus	80,589	73,433
*After depr. of	73,508	71,076
Working capital	141,833	134,918

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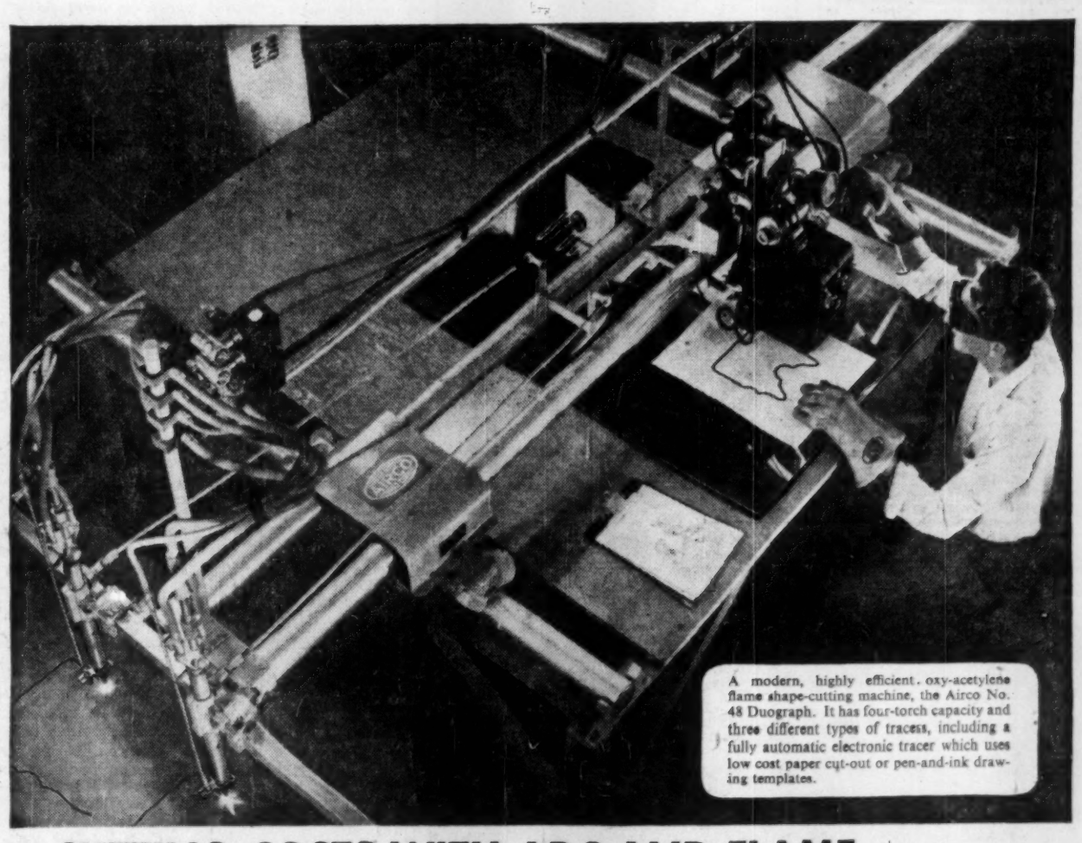

A modern, highly efficient oxy-acetylene flame shape-cutting machine, the Airco No. 48 Duograph. It has four-torch capacity and three different types of tracess, including a fully automatic electronic tracer which uses low cost paper cut-out or pen-and-ink drawing templates.

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Industrial miracles at 6000° F

Large-diameter stainless steel pipe being Argowelded (inert gas shielded arc welding). Part of service piping for huge chemical plant. 350,000 ft. of such piping was Argowelded to ensure perfect and durable joints.

Two of the most effective cost-reducing agents in modern industry are the oxy-acetylene flame and electric arc — *6000 degrees of intense controlled heat* for a myriad of tasks.

Several extremely useful industrial processes which save time and money to help turn out better products have been developed from these two sources of heat.

New applications of such processes constantly are being discovered by forward-looking companies — often with the co-operation of Canadian Liquid Air technical staffs. The newer processes, such as Argowelding and Aircomatic welding, are amazingly efficient — while older processes like flame shape-cutting have been greatly improved and streamlined to keep step with industrial trends.

A review of *your* plant operations might reveal new ways to cut costs with arc and flame. Liquid Air will be glad to help. You can reach us anywhere in Canada — we're coast to coast.

As Canada's largest producer of industrial and medical gases, and a supplier of L.A. & Airco welding and cutting equipment, Miller A.C. and D.C. arc welders, L.A., Arcaloy and Amsco electrodes, gas rods and supplies, backed by extensive technical experience, we provide a complete service to industry everywhere.

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- Airco Flame Shape-Cutting Machines
- Gas Welding Rods and Accessories
- Miller A. C. and D. C. Arc Welders
- Electrodes and Accessories
- Industrial Gases — Oxygen, Liquid Oxygen, Acetylene, Nitrogen, Liquid Nitrogen, Argon.

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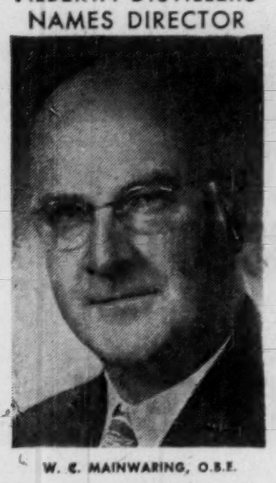

W. C. MAINWARING, O.B.E.

Elected to the Board of Directors of Alberta Distillers, Limited at the Annual Meeting held in Calgary is W. C. Mainwaring, O.B.E., well-known Vancouver industrialist. This increases the number of directors from seven to eight.

Directors returned are George H. Reifel, President; Harry F. Reifel, Vice-President; Charles H. Wills, Secretary; George C. Reifel; Frank M. McMahon; Norman R. Whittall; and Robert M. Linden.

In making the announcement Mr. George H. Reifel stated that the Board of Directors had been increased in keeping with the growth of the Company and expansion of its operations.

Mr. Mainwaring is Vice-President and Assistant to the President of B. C. Electric; President of Western Development and Power Ltd.; Vice-President and Director, Britalta Petroleums Ltd.; and Vice-President and Director, Royalite Oil Co. Ltd.

BOUZAN MINES reports that hole A-24 cut 4.54% copper over 18 ft. at a depth of 779 ft. to 797 ft. Hole A-27 cut 1.73% copper over 14 ft. at 620 ft. to 634 ft.

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HERE'S AN EXAMPLE of Canada's tangled motor transport laws, which are to be reviewed by an interprovincial conference in Toronto next week. The unusual combination of tractor and trailers seen here is a product of differing regulations in British Columbia and Alberta.

Can This Conference Sort Trucking Chaos?

By ARTHUR HAILEY

At 10 a.m. next Monday, in the Tudor Room of Toronto's Royal York Hotel, a conference of the nine Canadian mainland provinces will be called to order.

And for the rest of the week provincial cabinet ministers and their senior officials will wrestle with a common problem — the regulation of Canada's lusty but troubled transport industry.

Few interprovincial conferences in recent years will have received less advance publicity than this one. Yet few have had more direct bearing upon interprovincial commerce and the future growth of Canadian industry, particularly in newly developed areas.

For out of the Toronto meeting may emerge a master plan for co-ordinated regulation, in the public interest, of motor transportation in all mainland provinces. And if that happens it will mean the end to an existing situation of which "chaotic" is a polite description.

Watching the conference closely — though from outside closed doors—will be representatives of the Canadian trucking industry, its customers the shippers of goods, and forms of transportation competitive with trucking, notably the railways.

Mr. Hailey is a specialist in road transport affairs. Earlier this year he served as Road Transport Adviser to the Gordon Royal Commission on Canada's Economic Future.

And although the three groups diverge sharply in their views on what type of regulation is needed to control motor transport, they are agreed on one thing: there is need for change all around and —along with change—uniformity.

A Hodge-Podge

Today the laws controlling highway trucking in Canada are a hodge-podge of differing, and sometimes conflicting statutes and regulations. Each province has its own code and to stay within the law on a long interprovincial haul is frequently difficult and invariably costly.

Nor are the differences between provinces only minor.

In some instances there are wide divergencies in provincial government policies — some, in fact, so wide that they will certainly not be reconciled at Toronto. But even where common ground does exist in the matter of truck regulations there is no official liaison between provinces and each, at the moment, is operating in its own watertight compartment.

In effect, a horse-and-buggy administrative machine is attempting to regulate a virile, 20th century industry.

It's this situation that the Toronto conference is aiming to improve.

To appreciate the events which have led up to next week's parley it's necessary to understand a struggle between Ottawa and the provinces for control of the motor transport industry. And the story goes back, first, to Confederation.

In 1867 the British North America Act specified the various legislative functions of the federal and provincial governments. But at that time no one foresaw the age of motor transport, and the regulation of highway traffic wasn't specifically provided for.

The closest thing to a definition of control is contained in Section 92 of the act, which says the provincial governments have control over "local works and undertakings" excepting the following:

The Exceptions

"Lines of steam or other ships, railways, canals, telegraphs and other works and undertakings connecting the provinces with any other or others of the provinces, or extending beyond the limits of the province."

For a generation, up to 1954, the exact legal meaning of that clause — and particularly the words "work or undertaking" — created a continuous running fight between the proponents of provincial control on the one hand and federal control on the other.

Obviously, if a motor transport route which crossed a provincial border was a "work or undertaking," then its regulation was a

Continued on page 33

OFFICE AND FACTORY

BOTTLING PLANT

Versatility is the word for
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HIGHWAY MAINTENANCE GARAGE AND OFFICE

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18-4

Truckers Probe Finances

Canadian Trucking Associations has completed a giant study on the theories, objectives and practical problems of road finance.

The study will be filed with the Canadian Good Roads Association's 1956 convention, to be held in Quebec City, Oct. 2-5.

It has been described by the CTA as "the Canadian trucking industry's first major excursion into the complex depths of economics and fiscal theory and practice . . ."

The study comes to grips with the issue of weight-distance (ton-mile) taxes; reciprocity for commercial vehicles between provinces and states; and the big question of highway finance all over the world: The share of road costs to be borne by the different classes of road users.

Directed by CTA President William C. Norris, of Montreal, a CTA team prepared the submission. The work involved CTA's permanent staff; two economists with special qualifications in transportation and highway finance; and J. O. Goodman, general manager of the Automotive Transport Association of Ontario.

The paper is specially beamed at policy-makers on highway taxation in every province.

The CTA paper will urge that road user taxes should be simple, easy to administer and to collect, equitable, non-discriminatory and should enjoy the support of vehicle operators.

Weight-distance taxes of any form must be rejected as being inconsistent with economic and fiscal theory and practice, says the submission.

The paper will build up a case that weight-distance taxes are imposts on "road use" and not on "road costs caused."

Detailed arguments that ton-mile and related taxes are notoriously expensive to collect will be set out in the paper.

The paper develops the view that a cost approach to road user taxation is best.

Manitoba's Money Harvest See $1.9 Million Surplus

From Our Own Correspondent

WINNIPEG — With provincial revenue sources for the first six months of the current fiscal year running close to the record high figures estimated in the 1956 budget, and more money from tax rental agreements, the Manitoba Government is likely to close its books next March 31 with a surplus of $1.9 million—well above the $442,280 estimated in last winter's legislative session.

Former Provincial Treasurer Ron D. Turner estimated revenues at $65,016,000 and expenditures of $64,573,720. Included in the revenues was $28.4 million from the tax rental agreements which may be higher. They may be close to $30 million.

The first Ottawa payment this year came on June 1 for a three-month period and amounted to $7,473,713. If each of the next three quarterly payments reach this amount the total return would be $29,894,852 or $1,404,852 more than estimated.

For the first six months of the year provincial revenues have continued buoyant. Amusement tax returns estimated at $885,000 are running below par. Probably because of impact of television on the movie industry. Yields of other revenue sources are running even with what was estimated and in same cases better.

Liquor profits estimated at $8,650,000, are keeping about even with the estimates.

Gas tax estimate for the year was $11 million. For May, June and July gross receipts were $4,299,083 compared with $3,444,124 for a corresponding period before the increase came into effect. The net return will be less because of refunds.

In the natural resources branch, revenues of the first half year are up chiefly because of bigger oil production now running in excess of 500,000 bbls. per month.

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Big results in automation at little cost

ADP obtained maximum benefits for this company—without heavy investment—and without disturbing current operations.

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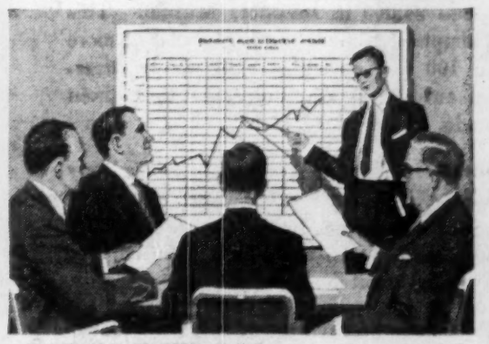
CUSTOMER SERVICE—Completed forms move ahead rapidly so that orders are received, shipped and billed the same day: Shipping set copies to Stockroom, Shipping and Traffic . . . Invoice set to Billing for release on notice from Traffic . . . Punched cards to Tabulating for analysis and preparation of reports.



MANAGEMENT REPORTS—Tabulating provides reports daily (not weekly or monthly) *on the previous day's activity.* They are accurate, up-to-the-minute summaries on which management bases decisions that affect business today. This furnishes control never before realized, with the benefits felt in inventory handling, distribution and procurement.

Moore forms are the heart of the system *They deliver the ADP efficiency*

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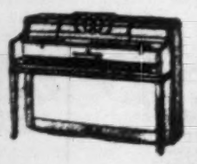

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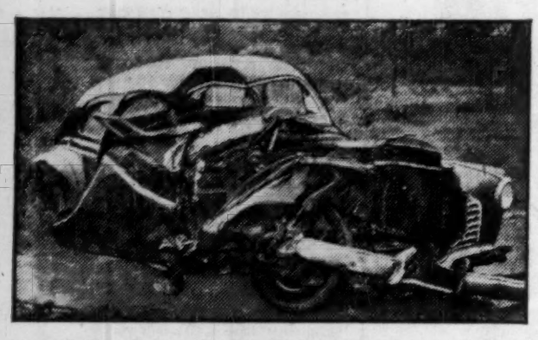

Head-On Smash-Up Takes Father of Two

Widow and Children Receive $10,000 on $5,000 Policy

On his way to spend the week with his family, a young businessman was the victim of a highway smash-up.

His death came only a few months after he took out a Confederation Life Policy for $5,000, with an Accidental Death & Dismemberment clause. He chose this policy because of its low cost Double Indemnity *guarantee* in case of accidental death.

It was a wise choice because Confederation Life promptly paid his widow *twice* the face value of the policy, $10,000 instead of $5,000. This substantial sum of money was a godsend to the bereaved family.

A $5,000 policy with Confederation's Accidental Death and dismemberment Benefit pays:

- Liberal cash payments for non-fatal dismemberment accidents and
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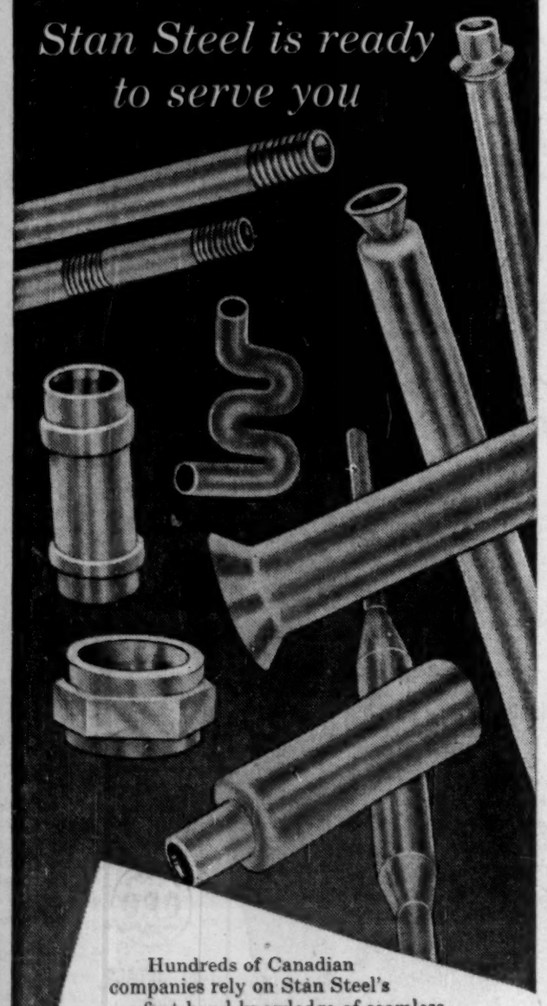

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Sorting Out Truck Chaos?

(Continued from page 32)

federal matter. But if not, provincial control was absolute.

Prior to the 1930s the matter was little more than a lawyers' debating point. This was because motor transport was just a minor factor in the nation's economy and the Government at Ottawa wasn't interested in its regulation.

But in 1937, with trucks assuming increasing importance in the national transportation picture, the Government moved to bring trucking under federal control.

Hon. C. D. Howe (then minister of transport) introduced a bill to provide federal control of all forms of Canadian transport, including trucks.

The bill proposed that the existing Board of Railway Commissioners should become a Board of Transport Commissioners, with authority over railways, ships, aircraft and motor vehicles.

However, the bill was defeated in the Senate. It was then shelved until 1938 when it became law—but without the clause affecting motor transports, which continued to be administered by the provinces.

Legal Advice

Despite this, the Government's legal advisers still maintained that Ottawa had the right to control interprovincial and international motor transport, and the provinces were acting illegally in doing so.

The arguments, though, merely simmered until 1949 when a decision of the Supreme Court of New Brunswick again brought the issue into focus. The Court ruled that a motor transport line extending across a provincial border was, in fact, solely under the control of the Parliament of Canada, and the province had no power to regulate it.

Thus began a legal battle which lasted five years, with the New Brunswick decision being appealed successively to the Supreme Court of Canada and the British Privy Council.

Throughout the long proceedings federal government representatives maintained their traditional stand in support of federal control. Counsel for the Government upheld the rightness of the New Brunswick ruling — and in the end this view prevailed.

After a 20-year fight the proponents of federal control had won, and the defeated provincialists went home expecting Ottawa to take over the regulation of transborder trucking immediately.

But nothing of the sort happened.

Instead, in February, 1954, one day after the Privy Council gave its final legal ruling, Hon. Lionel Chevrier (then minister of transport) told the House of Commons the Government was "reluctant to enter this field and thereby bring about divided jurisdiction."

A method would be found, he said, to hand over to the provinces authority over transborder motor transport. A few months later the Motor Vehicle Transport Act became law and did just that.

The Effect Remained

But though two decades of legal wrangling had ended their effect still remained. In the years that jurisdiction over transborder trucking was being disputed (particularly between 1949 and 1954) many truckers had openly defied provincial authorities, and had established interprovincial truck routes without operating authority of any kind.

The provinces, unsure of their own powers, had hesitated to curb these operations.

The result was that any individual who could make a down payment on a tractor and trailer had been virtually able to operate anywhere in Canada he chose.

This "vacuum period" (as it has since become known) attracted many individuals whose business acumen, and sometimes ethical standards, were not high.

Because of this there were an unusually large number of business failures in trucking, shippers of goods suffered delays and sometimes loss, and the entire long-haul trucking business fell into disrepute.

At the same time the national interest was suffering because some truckers, desperate to forestall repossession of their heavily mortgaged equipment, were operating at uneconomic rates—with the result that Canada's entire freight rate structure, both for properly licensed trucks and the railways, was being undermined.

It was this situation to which the provinces fell heir in 1954 when the Motor Vehicle Transport Act became law. Up to that point the provincial governments had had unchallengeable jurisdiction over trucks operating solely within their own boundaries.

Now their jurisdiction was extended to cover all trucks within a province, no matter where they came from or where they were bound.

Two Reasons

This was an important responsibility of two reasons.

First, by 1954 interprovincial trucking had developed to the point where it was big business.

Second, trucking had demonstrated its importance in aiding the growth of industry in newly developing areas.

In Ontario and Quebec many communities remote from a rail head had already burgeoned into prosperity because of truck service, and this was a factor of which all provincial governments were aware.

Opinions differ as to whether or not trucks are paying their fair share of taxation, but most people agree that a healthy trucking industry is now essential to national well-being.

Those most closely concerned, therefore, were hopeful that the provinces would accept their new duties seriously and work closely together in permitting trucking to develop on sound lines and in the national interest.

But not only has this failed to happen, but the situation has worsened until today some of the most vociferous former opponents of federal control are now urging Ottawa to step in and take over.

One of the big problems is control of entry into the trucking business. Some provinces (Alberta, Nova Scotia, P. E. I., Newfoundland) believe in a "wide open" licensing system on the theory that unhindered competition will provide the public with lowest transportation rates.

Other provinces (Manitoba, Ontario, Quebec, Saskatchewan) believe that competition should exist, but that some degree of stability is necessary for the public good, and hence the granting of trucking permits should be controlled.

One province (New Brunswick) subscribes to the second view in theory, but in practice grants permits to almost all comers.

Theoretical Standards

British Columbia has also, under the Bennett regime, relaxed its theoretical licensing standards.

The problem here is that a trucking firm seeking to establish an interprovincial route must meet the individual requirements of each province through which the route will pass.

For instance, a company wanting to operate from Montreal to Vancouver would need to make separate appearances before provincial boards in Quebec, Ontario, Manitoba, Saskatchewan and B. C. To each board an applicant would have to prove "public convenience and necessity" as a reason for being granted an operating permit.

Only in Alberta could he get his permit virtually "over the counter."

Since this process requires witnesses, and usually lawyers, at each hearing, it is long, tedious and extremely costly. Hence some trucking companies which would long ago have extended their service into new areas have balked at this appalling waste of time and money.

Nor is there any guarantee that success in one province will bring success in another. There is no liaison between provinces and quite conceivably an applicant could be granted a permit in five provinces and then be turned down in the sixth—nullifying the whole thing.

A logical procedure would be for an inspector (employed either by one of the provincial governments or a central secretariat) to investigate an application, interview witnesses and report his findings to each of the provincial boards.

Alternatively, the provinces might agree that a licensing decision by one province should be acceptable by the others.

Subject Reopened

Both these procedures have been urged at previous provincial meetings, but so far neither has been accepted. The subject will be reopened at Toronto next week.

Another barrier to unified administration is the regulation of trucking rates. Six provinces (Alberta, New Brunswick, Newfoundland, Nova Scotia, Ontario, P.E.I.) have no rate regulation at all. British Columbia and Manitoba have statutory rate regulation, but reports indicate that enforcement is lax.

Saskatchewan and Quebec have fairly strict rate regulation. Quebec, in fact, controls rates on the full movement of freight even where it originates or is being delivered in another province (for example, Montreal to Toronto) though the legality of this has been questioned.

How these various laws can be reconciled, if at all, is a difficult question.

Certainly there is no immediate hope of uniformity across the country—political philosophies of the various governments are too far apart. But a compromise might be achieved in that an interprovincial trucking company would observe the rate regulation law in its home province, with other provinces waiving their local requirements.

The likelihood of this problem being resolved during a one-week conference is not great.

The third big factor which, truckers claim, is holding back development of interprovincial motor transport is the absence of vehicle license reciprocity between provinces.

Reciprocity merely means the acceptance of a provincial motor vehicle license plate in another province. Automobile owners enjoy complete reciprocity both in Canada and the U.S.

Coast-to-Coast

For example, a Nova Scotia car owner can drive to the west coast and back, and his Nova Scotia license plates will be valid in every province. But trucking firms don't enjoy this privilege and, with a few minor exceptions, must buy vehicle license plates in each province through which their trucks travel.

(It should be explained that a vehicle license and a truck operating license are two different things. Anyone can buy license plates, but they are no good to truckers without an additional operating license or permit.)

The trouble is, while many provincial officials will agree privately that the present lack of reciprocity is unjust, the provinces are reluctant to give up a profitable source of revenue.

However, there are some outspoken critics of the present setup—notably Hon. Gordon Taylor.

(Continued on page 34)

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The grandest advance in hat-making in years—and it makes hat-*buying* a pleasure! Stetson "Shaped-to-wear" hats are made completely ready to wear *at the factory*. All you have to do is select your style-favourite and wear it—proudly—out of the store! *All* "Shaped-to-wears" incorporate traditional Stetson style and value. P.S.: Of course, you can still buy Stetsons *to be creased* to your taste in the store.

Stetson prices: $9.95, $11.95, $15 and up

Mallory Hats (Canada) Limited — a member of the Stetson Group of Companies — also has its own smart line of "Shaped-to-wear" hats.

Stetson Sterling *"Shaped-to-wear"*

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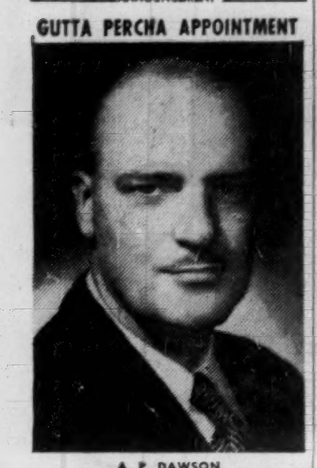
ANNOUNCEMENT

GUTTA PERCHA APPOINTMENT



A. P. DAWSON

M. O. Simpson, Chairman and President announces the appointment of A. P. Dawson, B.A.Sc., P.Eng., as Vice-President and General Manager of Gutta Percha and Rubber, Limited. Mr. Dawson graduated in Mining Engineering from University of Toronto in 1935. He joined Gutta Percha in 1936 as Sales Engineer in Northern Ontario and N.W. Quebec, and subsequently held positions at Head Office on the Sales Engineering staff; as Assistant Manager, Mechanical Goods Department; and as Assistant General Sales Manager. In 1953 Mr. Dawson assumed the duties of General Sales Manager, and in 1955 was appointed Vice-President, Marketing.

They Hope To Untangle 'Hopeless' Truck Mess

Continued from page 33

highways minister of Alberta. Mr. Taylor said recently that although Alberta has offered full reciprocity to all other provinces, no one has accepted it.

Saskatchewan and Manitoba have agreed to 50% reciprocity with Alberta, and Ontario has agreed to reciprocity on household goods shipments only. But otherwise—no dice.

Mr. Taylor said bluntly that failure of all provinces to accept full reciprocity is "shortsighted and is an impediment on the free movement of goods and interprovincial trade."

His views will certainly be heard at Toronto next week, but here he may get opposition from Ontario.

Other Issues, Too

If reciprocity between provinces were the only issue, Ontario would likely go along with Alberta. But tied in with this issue is the matter of reciprocity with the U. S.

It would be hard for Ontario to agree to all-Canadian reciprocity without offering the same privilege to neighboring U. S. states.

New York State and Michigan particularly would like wide-open reciprocity because of the all-important Ontario route between Buffalo, N.Y., and Detroit. For years the two states have sought agreement for U. S. trucks to use this route around the north shore of Lake Erie, which is 100 miles shorter than the all-U. S. route. But although in 1952 Ontario opened the way to some U. S. trucks, it still exercises tight control by charging $7 for each one-way journey of each vehicle, and trucks are barred on Sundays.

The revenue from this source is relatively unimportant to Ontario, but the cost of maintaining the highway would be high if there were "wide-open" reciprocity. It is conceivable, though, that Ontario might reconsider this matter if it proved the only obstruction to interprovincial agreement.

One possibility in solving the financial problems of reciprocity would be for an interprovincial trucking company to pay one substantial license fee in its home province, and for the amount collected to be allocated among all provinces on the trucker's route according to an agreed formula.

But certainly any such formula would require a great deal of advance study before going into effect.

Physical Limits

Next to licensing, rate control and reciprocity, another big problem is the physical limitation placed by each province upon trucks and tractor-trailers operating within its borders.

In the matter of vehicle weights, length, height, safety, lighting, and many other subjects, each province has its own set of regulations—and all ten sets are different.

Some of these variations are sane, others ridiculous.

Differences in permitted weights for vehicles are logical. It is commonsense that the ability of highways to carry specific weights must vary from province to province. And since provincial taxpayers pay for highways, it is reasonable that the provinces should decide the weight limitation to be placed upon them.

Actually, within the last few years provincial weights for trucks have been approaching uniformity. Now, of the mainland provinces, only Saskatchewan has an exceptionally low gross weight (45,000 lb. for a four-axle tractor-trailer combination compared with 56,000 lb. in Alberta and B. C., 54,000 in Manitoba and 58,000 in Ontario).

One obvious necessity, though, will be to arrive at a uniform weight for the Trans-Canada Highway, when completed.

Since TCH is a first-class road, built to uniform specifications in all provinces, Ontario will undoubtedly urge adoption of its own gross weights (now the most liberal in Canada) throughout the highway's length.

This subject will come up at the conference too.

Comic Opera Rules

Height and length regulations are less of a problem and could be standardized with a few concessions by a few provinces. So could lighting laws—though at the moment there are like something out of a comic opera.

Every province has different ideas about the colored identification and clearance lights which appear on the front, sides and rear of trucks and tractor-trailers. The same thing applies to directional signals.

No two provinces have identical regulations and there are further complications when trucks travel into the U. S.

A rig that is legally equipped for long hauls between several provinces and states looks, at night, remarkably like a Christmas tree—which it actually represents to the vendors of lighting equipment, but not the unfortunate truckers.

Other problems—such as insurance, COD regulations, hours of labor, bills of lading, licensing of leased vehicles, interchange of trailers—abound. But although differing provincial regulations cause needless paper work for trucking companies, all could be adjusted later if some of the bigger issues can be settled next week.

But even if agreement on general principles can be achieved next week (and that is by no means certain), there is urgent need for some co-ordinating body to provide permanent liaison between the various provincial transport boards.

Otherwise, however good the intentions may be, there will be no machinery to put them into effect.

No Results Earlier

This is one reason why an earlier conference (held in Winnipeg in September 1954 under the sponsorship of Premier Douglas Campbell of Manitoba) failed to produce any follow-up results. Another reason was that provincial ministers and their officials didn't have the understanding of their problem in 1954 that they have in 1956.

To prevent repetition of the Winnipeg failure one proposal to come before the Toronto conference will be for establishment of a permanent secretariat, responsible, not to one provincial government, but to all.

If the idea is approved, initially the secretariat may consist merely of a modest office. But its advocates see it eventually as an organization on the lines of the U. S. Interstate Commerce Commission, taking over many of the functions (though not the ultimate authority) of provincial transport boards, and eliminating much of the duplication now existing.

If next week's interprovincial gathering does produce tangible results, much of the credit for them will go to a 42-year-old British Columbia-born lawyer, S. H. S. Hughes, chairman of the Ontario Highway Transport Board.

With the benevolent approval of Ontario's Premier Leslie Frost and his cabinet, Mr. Hughes has spark-plugged the conference since it was first proposed last February.

A teacher of history before he became a lawyer, Mr. Hughes maintains that a solution to the motor transport problem is essential to Canada's continued economic development.

Must Do Something

He told this writer last week: "Unless we do something to improve our present administrative methods, trucks will not be able to compete effectively with other forms of transport. Just as the railways developed our present big industrial centres, trucks are helping develop newer portions of the country. It would be hostile to the public interest if we permitted poor administration to prevent that development continuing."

What happens if the Toronto conference fails, or produces no major results? The answer: nothing.

Some observers (including a segment of the trucking industry) believe that if the provinces cannot administer motor transport successfully, the St. Laurent Government may step in and take over, which it can do merely by repealing the Motor Vehicle Transport Act.

However, it can be stated here authoritatively that there is no possibility whatever of this happening. The Federal Government now looks on trucking as a political hot potato and wants no part of it in any circumstances.

Ottawa's attitude to the provinces can be summed up as being on the lines: "You wanted provincial control. Now you've got it, and it's up to you to make it work."

How well this advice is being heeded can be better appraised a week from Saturday.

Live TV Programs More Phones By Microwave Link

Television stations in North Bay, Sudbury, Port Arthur and Winnipeg will receive live CBC programs for the first time when the Toronto to Winnipeg microwave link goes into service Sept. 30.

Scores of new long-distance telephone circuits will be provided by the opening of the 1,200-mile link, part of the trans-Canada 3,900-mile network due to be completed early in 1958.

The link, which took almost 30 months to build, has 42 relay points of the total 139 needed coast to coast. Next link to go into service will be the Saint John, Moncton, Halifax and Sydney section, due for December this year.

CANADA OIL LANDS LTD., had a net loss of $59,522 in 1955, down from a loss of $66,710 in 1954, the annual report shows. Varying interests were held in 1,342,990 gross acres in Alberta and miscellaneous leases totalling 11,859 acres. In Manitoba, leases are held on 3,200 acres, in Saskatchewan, 2,041 acres and a 47.5% interest is held in 70,000 acres in Ontario. Also a gross over-riding royalty of 1.77% is held in about 1,586,755 acres in Saskatchewan being explored and developed by **Tide Water Associated Oil.**

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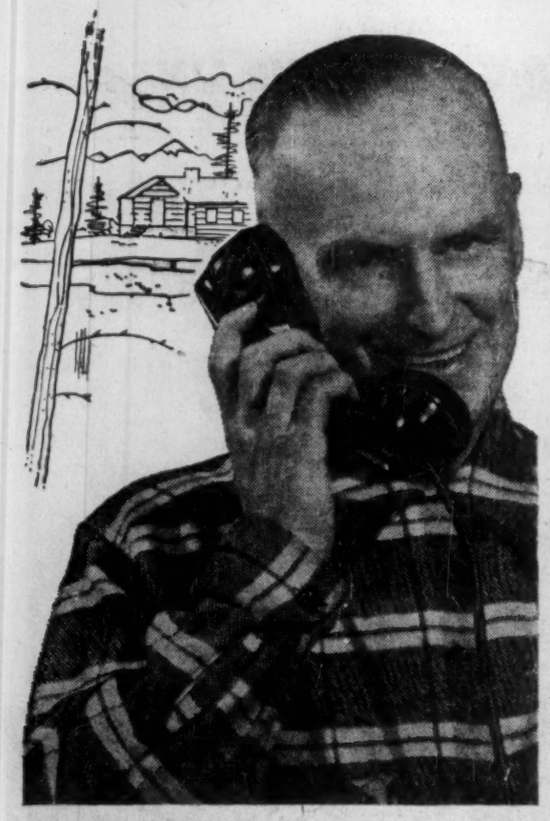

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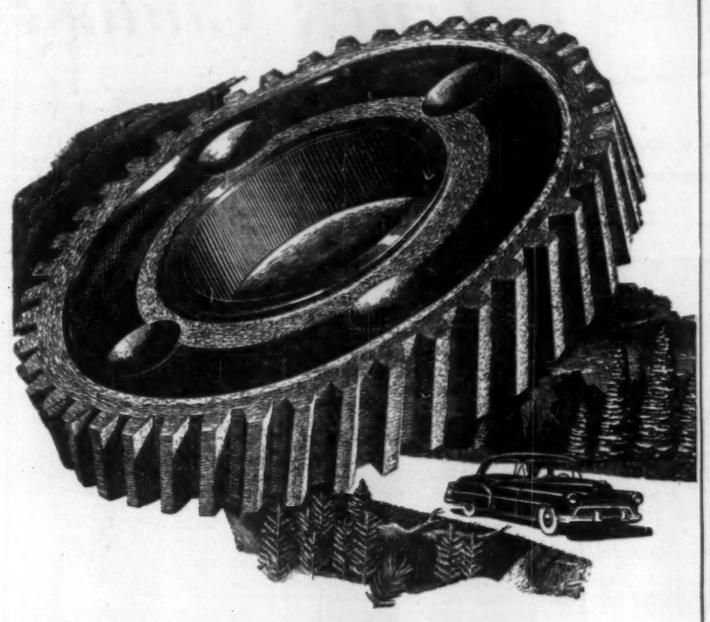

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Many automobile manufacturers, faced with a timing gear noise problem, have solved this by machining gears from a laminated plastic stock. Plastic gears work and wear in highly satisfactory fashion... and contribute to the silent operation which makes today's motorists so proud of the cars they're driving.

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Uses of RCI Products

CANVAS, PAPER AND GLASS CLOTH LAMINATES: PLYOPHEN cresol, phenolic and resorcinol-formaldehyde resins and varnishes; RCI polyester resins.

CARBON PAPER: RCI inorganic chemical pigment colors.

CASTINGS: FOUNDREZ powdered phenolic resins (for the shell molding process); FOUNDREZ liquid phenolic resins and FOUNDREZ core oils (for core binders).

FURNITURE, PLYWOOD, FLOORING, HARDBOARD AND CHIPBOARD: PLYACIEN protein glues; PLYAMINE urea-formaldehyde glues; PLYOPHEN phenolic and resorcinol-formaldehyde glues.

LEATHER: BECKOSOL alkyd resins (for leather finishes); PLYOPHEN resorcinol-formaldehyde resins, SUPER-BECKACITE pure phenolic resins, SYNTHE-COPAL ester gums (for leather adhesives).

LINOLEUM: BECKOSOL alkyd resins and PENTACITE pentaerythritol resins (for linoleum coatings); RCI inorganic chemical pigment colors.

PAINTS, VARNISHES AND LACQUERS: BECKACITE (1) fumaric, (2) maleic and (3) modified phenolic resins; BECKAMINE urea-formaldehyde resins; BECKOLIN synthetic oils; BECKOPOL modified phenolic resins; BECKOSOL (1) phenolated, (2) phthalic-free, (3) resin modified, (4) pure drying and (5) pure non-drying alkyd resins; KOPOL processed Congo copals; PENTACITE pentaerythritol resins; STYRESOL styrenated alkyd resins; SUPER-BECKACITE pure phenolic resins; SYNTHE-COPAL ester gums; WALLKYD pure drying alkyd resins (for alkyd flat wall vehicles); WALLPOL vinyl-type copolymer latex emulsions (for latex flat wall coatings); RCI inorganic chemical pigment colors.

PAPER: BECKAMINE urea-formaldehyde resins (for adding wet strength, improving the wet rub of starch-clay coatings, and waterproofing starch adhesives); RCI inorganic chemical pigment colors (for paper coloring); STYRESOL styrenated alkyd resins (for paper coating).

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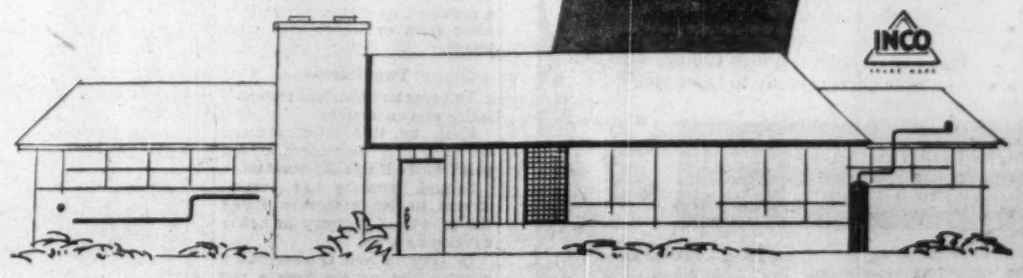

THE INTERNATIONAL NICKEL COMPANY OF CANADA, LIMITED, 25 KING ST. W., TORONTO

We Need Skills and Capital, But Let's Canadianize Them

No country has grown as fast as Canada in the last 10 years. And Canadians have financed 75% of the growth. But, although we want more capital and more skilled people, do we want:

- **More U. S. capital?**
- **And the same set up for subsidiaries here?**
- **More immigrants?**
- **And the same set up for education here?**

J. N. T. Bulman, Winnipeg, president of the Canadian Manufacturers' Association, answered these points in an address recently to the directors of the Canadian National Exhibition in Toronto. This is a digest.

By J. N. T. BULMAN

"We want to retain in Canada our own citizens, to provide them with employment at fair wages, to build up a diversified nation, to develop our raw materials and our natural resources, through the efforts of Canadians, and to secure the rewards of industrial enterprise for Canadians.

"Canada is one of the few countries in the world possessing vast natural resources in a largely undeveloped state, and consequently the eyes of the world are turning enviously to us.

"If we do not take the proper precautions we shall lose the added value which would be created by completing manufacturing processes in this country."

These words were said by the president of the Canadian Manufacturers' Association at the 48th annual meeting in June 1919, in Toronto.

The speaker was my father, and the words are as meaningful today as they were then.

This might suggest that, since the words are appropriate 37 years after their initial delivery, we haven't made too much progress in the field of full manufacturing and that we are still too dependent on the extractive industries to justify the title of genuine industrial power.

In actual fact, we have achieved a great measure of diversity in manufacturing since the First World War concluded and our progress in this direction has been exceptional in more recent years.

But the words are still true to the extent that we must never stop in our drive to build secondary industry to an undeniably pre-eminent position in the economy.

Full, or nearly full, fabrication of a bigger and bigger percentage of raw materials will not only add value to the goods themselves, but it will free us from chronic trade imbalances; it will boost employment; it will attract the best class of immigrants, and it will afford us such stability in our economy that we will be less shaken by unexpected external disturbances over which we have no control. In other words, we will indeed become a world power in our own right.

Canada is, more than anything, a manufacturing nation. She is not primarily an agricultural country, nor is she chiefly a producer of raw materials to feed the industries of outside nations, nor is she simply a tourist attraction. Statistics more than adequately prove this point.

Canada's Growth

More people are employed in manufacturing than in any other segment of the economy — actually one out of every four gainfully employed persons in Canada receives his or her pay cheque from the proceeds of manufacturing.

In 1955 the Gross National Product reached the record total of $26.2 billion. Of this total, manufacturing was by far the largest single contributor.

In its climb, manufacturing has outstripped both agriculture and the other extractive primary industries.

The most striking feature of Canada's expansion has been the sustained size and scope of the nation's investment program. In 1945 Canadians ploughed back 10.8 per cent of their Gross National Product in capital investment.

Preliminary estimates for 1955 reveal that new capital expenditures amounted to $6.2 billion, or 23.3 per cent of G.N.P.

Intentions for 1956 anticipate a further outlay of approximately $8 billion, equal to more than one quarter of the expected G.N.P., although this figure may not be reached because of possible shortages of labor and materials.

There may be some sharp-eyed students who will say that other countries have exceeded these growth levels in individual years, but the point that I would like to underline is that, to the best of my knowledge, no country has experienced a decade of growth comparable to Canada's in the past ten years.

This is all to the good, but our need for expanding rapidly cannot be met by domestic investment alone, even though Canadians themselves have financed about three quarters of our total post war expansion. This is where the much-discussed role of foreign capital comes in.

Bring Foreign Capital

To be honest, our need for productive capital, domestic and foreign, is hardly less urgent than our need for more people: we cannot develop without both. We need outside capital for precisely the same reason we need more people: we haven't enough of either.

No young and fast-expanding country ever has had sufficient internal capital for its needs and, in Canada's case, without foreign capital to finance the extra requirements, national prosperity could not possibly have reached its present level.

The expansion we have experienced in recent years, to put it bluntly, would have been greatly moderated. In other words, fewer industries, fewer jobs, lower wages, fewer of the good things of life, smaller overall growth.

We don't need to be ashamed to admit this fact. Exactly the same thing was happening to the United States a century ago and it is perfectly natural that most of the outside capital flowing into Canada today should come from that country, now the most wealthy in the world.

Certainly, the higher the proportion of Canadian-owned capital invested in Canada the better. By all means, let us press for Canadian participation in foreign-owned enterprises.

Nothing but good can come from that, provided such a move is made voluntarily by the companies concerned. But no compulsion, no government intervention.

Of course, we all know that outside investment already controls a pretty large portion of Canada's manufacturing establishments and, if Canadians are to get the greatest benefits from such industry which is controlled either south of the 49th Parallel or on the other side of the Atlantic, I think we are within our rights to offer a few ideas to the owners of these establishments.

Canadian Directors

First: they might mull over, to their own advantage, participation of Canadian equity capital in the Canadian branch or subsidiary of the parent company and the addition of Canadian representatives to their directorate.

Second: they should increase the Canadian content of their manufactured products and carry out more of the development, engineering and research within the borders of Canada.

Third: they should provide for more Canadian participation in export markets and, in those cases where they are developing a natural resource, they should process the product right here in Canada as far as it is practicable to do so.

Tax Changes

A step of some practical significance is the proposed new dividend tax convention between the Governments at Washington and Ottawa which it is hoped will aid in expansion of Canadian investment in U. S. controlled companies operating in this country.

By virtue of this convention, which has been ratified by Parliament but has still to be approved by the U. S. Senate before it becomes operative, any parent company in the U. S. owning at least 51% of the voting stock of a Canadian subsidiary may continue to pay only 5% tax in Canada on dividends.

The treaty works the same way for Canadian companies with American subsidiaries. Under the present law the cut-rate 5% levy instead of the normal 15% applies only when parent company holdings are 95% or more.

I am one of those who believe that external capital should be encouraged into Canada just as long as it continues to stimulate expansion and prosperity.

There is a more fundamental reason still why nothing should be done to retard Canada's growth as a major industrial nation. It is the conflict between East and West.

Having arrived at what is, to all intents and purposes, a military stalemate, the emphasis is now on industrial and economic expansion. It would be a great mistake to assume that the West has a lead here which could not be overtaken.

And when we talk of the economic conflict between East and West, let us think for a minute about the warning implicit in the revelation that the Russians are turning out scientists and engineers and the like at a faster annual rate than we are here on the North American continent.

I suggest that not only will Canada's industrial potential in the next few years — added to that of the giant United States — prove important to the free world, but so, too, will her educational potential. The two go hand-in-hand.

We in the Canadian Manufacturers' Association have set up a special committee whose terms of reference are to review and study the current shortage of professional and technical personnel and, in co-operation with the Federal and Provincial Governments, the educational authorities, and other interested bodies, make recommendations as to ways and means by which the Association may assist in the alleviation and ultimate resolution of the problem.

Of course, this is a matter which is engaging the earnest attention of other professional and business organizations which have set up committees with similar terms of reference.

One of the difficulties is that education as such comes within provincial jurisdiction, but the question of the shortage of professional and highly trained manpower transcends provincial boundaries and leadership must be given at the national level.

In the U. K. the problem is being approached at the national level and important measures are being taken there to solve the problem.

Provincial barriers and the desire for autonomy in matters which have been provincial since Confederation, make it difficult for Ottawa to assume such responsibilities. But, for the sake of the national welfare, our productivity, our very economy, this is an occasion when the provinces should be asked to lower the bars.

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— Passenger Citation (Toronto to New York City)

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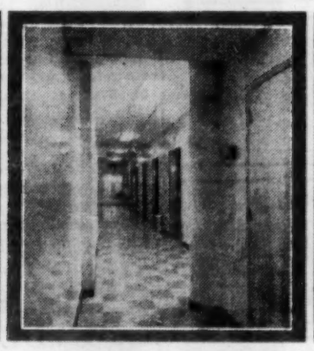

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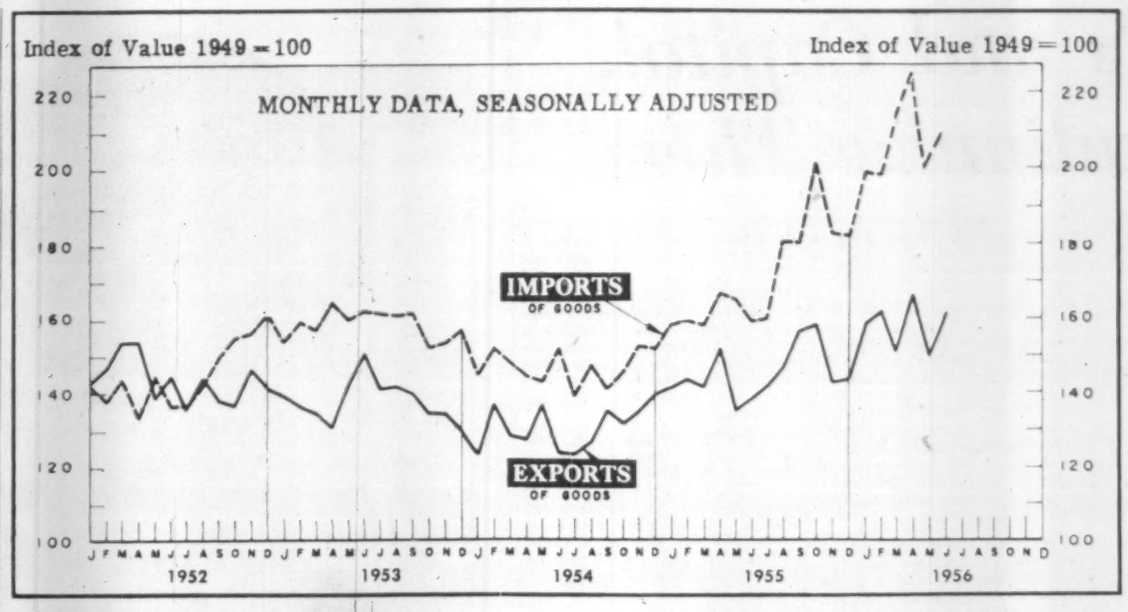

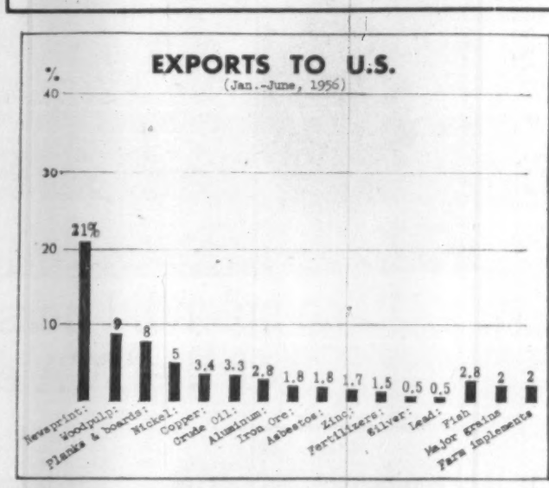

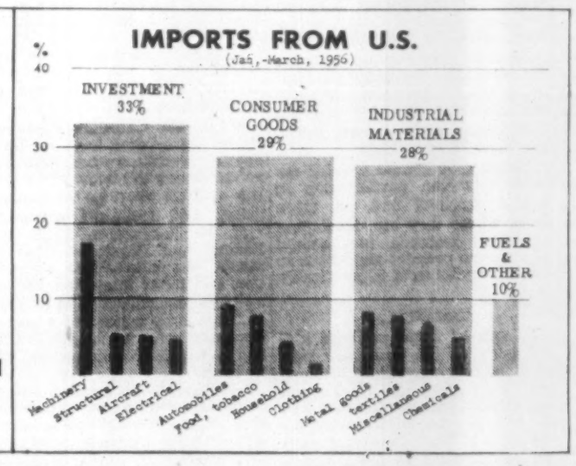

No Sign That Chasm Closing: Export-Import Gap Wide Open

By MICHAEL BARKWAY

OTTAWA (Staff)—In any normal year the 1956 record of Canadian exports would have shown up as an important boost for the whole economy.

In this extraordinary year, the 13% increase in exports is entirely overshadowed by the increase of nearly 30% in imports.

Export prospects remain good. The assurance of expanding sales of iron ore and crude oil stands against the uncertainty over wheat.

But up till now no sign has appeared to suggest that exports can catch up with imports. They don't even look like narrowing the prodigious gap, which amounted to very nearly $600 million in the first seven months of the year.

Even the U. S. steel strike in July made barely a dint in our record import totals. It lowered purchases from the U. S. by $17 million (or less than 5%) compared with June. But we went on increasing our imports from the U. K. and other Commonwealth countries, and kept up the rate from other foreign countries.

No Lull

August usually brings a lull in the pace of importing, which often carries over into September. But this year there is no evidence of a slackening. The volume of entries looks like being as high as ever,—more like last year when August was a big month.

U. S. goods continue to capture an increasing share of the Canadian market, (except for the strike-bound July). But the U. S. is not so far this year increasing its share of our exports. For them we remain much more dependent on overseas countries.

In the first half of this year the U. S. supplied very nearly three-quarters of our imports (over 74%). But its share of our exports still hovers around 59%. In 1954 it reached 60%.

The attached table shows 16 major items in our exports to the U. S. so far this year, which between them account for nearly 70% of the total.

Thirteen of them are the items selected by the U. S. Office of Business Economics to show the part played by U. S.-controlled companies abroad.

Take away these 13, to which (according to the O.B.E.'s calculations last year) U. S. firms contribute 54%, and only about one-third of our exports to the United States would be left.

Newsprint and pulp alone account for 30% of our sales to the United States. Non-ferrous metals are another 14%. Lumber, which provided 10% last year, was down this year to 8%. Aluminum and fertilizers were also down a little, but crude oil, copper and iron ore are far ahead.

One of the most interesting things which emerges from this way of breaking down our exports to the U. S. is this:

The 16 selected items, including the 13 where U. S. companies play a major role, do not account for the main increase in our U. S. sales in 1956.

Bigger Increase

A much bigger proportionate increase has taken place in the remaining one third of smaller items; so that the famous 13, where U. S. companies are concentrating, are so far this year playing a smaller role in our trade. They're down from 64% to 62% of our exports to U. S.

Here are some of the untabulated goods which have significantly increased their sales in the U. S. this year:

—Whiskey, which at nearly $24 million in the half year, should be considered a major item of trade.

—Apples; maple sugar; potatoes (a fourfold increase over last year).

—Furs—a mixed bag: ranch mink up, wild mink down; beaver and ermine down; foxes doing a little better.

—Textiles: a nice increase in cotton fabric, cotton clothing and synthetic thread and fabrics—all small items but managing to sell better in U. S.

—Hardwood veneers sold better than last year, though other veneers, plywoods and planks and boards were all down.

—Wooden doors and building and insulating boards up by 50% or better.

—Book printing paper increased from $2 million to $2½ million. Kraft wrapping paper trebled to over $700,000.

—Ferro-manganese attained U. S. sales of more than $5 million—better than the whole of last year. Other ferro-alloys, though only a $37,000 item, were better than 50% above last year. So was pig iron, reaching $4.7 million in six months.

—Ice skates more than tripled in quantity, not quite so much in price.

—Typewriters increased by 50% to reach better than $500,000 in six months.

—Metal - working machinery, textile machinery, lathes, refrigerating equipment all showed big increases—many of them better than double, though none of the separate items reaches $1 million for six months.

—Gypsum and lime were well up; so were electric motors and other apparatus. Selenium became a $1.5 million item.

—The non-metallic minerals as a group increased by $40 million.

—In the chemical group several items were better than double 1955's first half. Cellulose products almost tripled; medicines doubled; varnish exports increased six times.

—Sporting goods, cameras, lenses, organs, scientific apparatus, and aircraft parts all show major increases.

So the encouraging export record of 1956 is spread very widely, and by no means confined to the big bulk items.

Here's Our Latest Account In U. S. 'Shopping Splurge'

Import figures are available only in outline for the month of May. Details cover only the first quarter. Goods are pouring in at such a rate that the D.B.S. staff is half-drowned in the pile of paper and lagging seriously behind in tabulation.

But remembering that we get almost 75% of our imports from the U. S., the general nature of our buying splurge there can be seen.

The first quarter figures tabulated below are based on a new attempt to classify imports by the purposes for which they are intended, which was first reported in The Financial Post on Sept. 1.

May figures show that machinery still dominates the inflow of goods. It increased each month.

The flood of automobiles, however, apparently passed its peak in March. May imports were only half those of March.

But automobile parts kept on coming. April was the peak month, but May's level of imports was still just higher than March.

Rolling mill products, pipes and tubes, kept on growing month by month. So did coal and oil imports. (Items 3 and 4).

Of the other materials for industry, both textiles and chemicals seem to have levelled off a little between March and May.

Because of the large part played by automobiles in the group of consumer goods, imports for consumer use may not have risen very sharply in total. But food, drink and tobacco continued very high, and the spring may have brought increased imports of various household goods.

A significant and important feature of our increased imports from the U. S., which is beginning to get some attention, is the Canadian reliance on U. S. manufacturers for new products.

Two outstanding examples are freezers and the new automatic gadgets for automobiles, specially automatic transmissions.

When a new product is launched — specially in fields like automobiles and electrical apparatus which are dominated by U. S.-owned concerns — the makers naturally find it more economic to supply Canada from the output of the parent U. S. company.

Looking for College Men? More Jobs Than Graduates

(Continued from page 27)

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Nursing. About 5,000 registered nurses are graduated each year, about 30% from university schools, the rest from hospital schools of nursing.

Although there are substantially more nurses per thousand of population now than there were 25 years ago, there is still a shortage. This is particularly true in rural areas and in mental hospitals. There is also a shortage of experienced nurses prepared to assume senior positions.

Need is evident. Students should be encouraged to follow the necessary study for this profession.

Pharmacy. In 1955 and 1956 graduating classes numbered 300. The same number will likely graduate in each of the next three years. It is estimated that an annual graduation of 400 could be absorbed.

Before the last war, most openings were in retail drug trade. Now there are increasing opportunities in hospitals, research and production, industry, government departments, armed services as well as in the increased numbers of retail pharmacies.

Physical Education. Class of 1957 will be about 90; classes in 1958 and 1959 will be similar in size. All can be absorbed and there is no indication of oversupply.

With increases in prospect for bigger enrolments in public schools, additional openings will be available. There are also openings with boys' clubs, Y's and municipal playgrounds. Increased enrolment in this course could be absorbed.

Pure Science. Supply has for several years been below demand and increased enrolment in pure science honor courses could well be encouraged. There were 320 graduates in 1956 and will be 370 in 1957.

Greatest call for graduates will be for those in chemistry, physics, biology and mathematics.

Secretarial Science. Numbers of graduates in any one year is about 100. Many more could be used. Graduates need have no fear about obtaining employment since demand at present far outstrips supply.

Social Work. For several years graduates have numbered about 200. In 1955 and 1956 this rose to 300 per year.

Number of graduates in social work in the last few years has been in no way adequate to fill demands. One major reason has been low salaries, but to some extent this is being corected by organizations hiring such workers.

Theology. Numbers of graduates over past few years have run between 400 and 500. Canadian churches need more graduates in theology than its schools are producing.

Therapy. Over 100 students graduated in physical or occupational therapy in 1956. Prospects for the next few years are that the figure will not decline. Increased supply could be used. An increase in enrolment of 50% would not be too much.

Veterinary Science. Demand for veterinaries is overtaking supply. Graduating classes in 1956 totaled less than 80 and will be about the same for each of the next four years.

Numbers in Canada are not enough to fill demand. Increasing numbers of calls for graduates coming from meat packing companies, municipal and provincial governments, federal government and there are many opportunities for those wishing to start private practice.

Civil Service. Special mention is made of this employer because the federal government hires the largest number of each year's graduating class.

In 1954-55 the government employed some 86 agricultural graduates, 135 graduates in applied and pure science and 117 arts and social science graduates. In 1954-55 in the applied and pure science group, vacancies totaled 200. In 1956-57 such vacancies will likely number 400.

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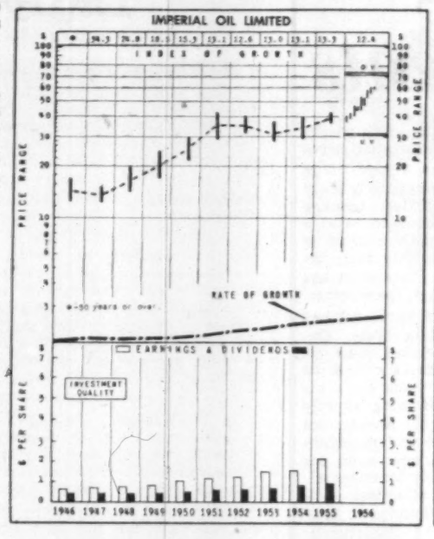
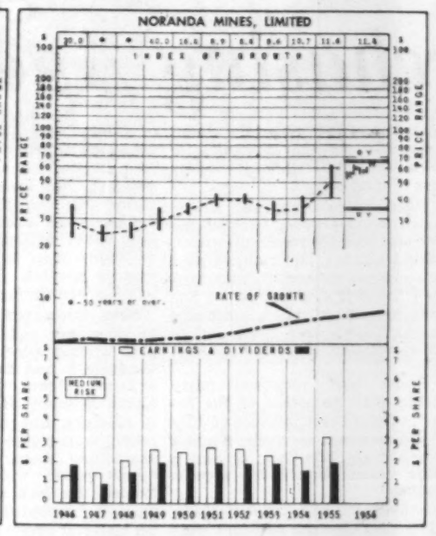
Selected Growth Stocks — quarterly review — By NESTOR

The Financial Post's exclusive series of Selected Growth Stocks was chosen by one of the continent's most prominent and successful investment advisers. The reasons for choice shown below the accompanying charts were those given when stocks were chosen in January 1953. Each will be reviewed quarterly. Publication of this series in The Post does not constitute a recommendation to buy these stocks.





Imperial Oil

Imperial Oil common, trading recently at $58, is 87% above its UV level ($31), could rise another 22% before reaching OV level ($71). Yield is 2.07%, based on new indicated annual dividend rate of $1.20. Stock is selling at 27.9 times 1955 earnings of $2.08 a share. Price this year has ranged between high of $62½ and low of $36¾.

A quarterly dividend of 30c a common share is payable Sept. 28 to shareholders of record Sept 4; previously, a dividend of 50c was paid June 1 to cover first two quarters of 1956.

Earnings in the six months ended June 30, 1956, were $33.7 million or $1.12 a share, 38.5% higher than first-half 1955's $24.4 million or 82c a share. Net production of crude oil averaged 98,423 bbls. daily, a 12.1% increase. Refineries processed 246,264 bbls. daily, up 9.6%. Product sales averaged 261,931 bbls. daily.

On a 50-acre site at Sarnia, Ont., Imperial Oil will soon launch construction of a $25-million hydrocarbon development. The petrochemical plant, which may be ready in 1958, will supply Canadian industry with large quantities of ethylene, propylene, normal butylenes, isobutylenes, butadiene, aromatic distillates and tars, and other products needed by the chemical industry.

The plant would be an important source of raw materials in the manufacture of such diversified products as plastics, antifreeze and synthetic rubber. Other companies have already shown interest in constructing new plants of their own at Sarnia, to tap this important new source of petrochemicals, and Imperial Oil has purchased lands, adjacent to its refinery, to provide suitable sites for potential industrial customers.

Here are other highlights in Imperial's continuing expansion:

—A new Halifax refinery, costing more than $25 million, is now coming on stream and will be opened officially Oct. 11. Its 41,500 bbls. daily capacity is more than double that of the refinery it replaces.

—Capacity of the Sarnia-Toronto products pipeline is being boosted from 55,000 to 76,000 bbls. a day. Work is to be completed late this year.

—Capacity of pipeline linking Winnipeg with the Interprovincial Pipe Line at Gretna, Man., is being increased from 29,000 bbls. to 38,000 bbls. a day.

—Contract has been awarded for work to begin next spring on a "powerformer," main item in a $4-million construction program at company's Ioco refinery near Vancouver. The new unit will boost quality, not quantity, of gasoline.

—Four more buildings, to cost $670,000, are to be built at company's expanding marketing terminal at Keele St. and Finch Ave. in northwestern Metropolitan Toronto. The package warehouse, bulk lubricating oil building, dispatcher's tower and service garage are to be ready by next summer.

No change in gasoline prices is foreseen in Canada, despite a tendency of U.S. prices to be forced lower by refineries' heavy inventory positions.

IMPERIAL OIL—Imperial's outstanding record for oil discovery in Western Canada, its large reserves, and its continuing exploration and expansion program promise, along with the continually growing demand for petroleum products, to maintain the company's position as Canada's largest and most fully integrated oil company.

NORANDA MINES—Noranda is a major integrated copper producer with large gold output. A sizable income from its investments tends to stabilize earnings and income. Further expansion of properties promises increasing earnings over the long term. Directly and indirectly, company's shares afford a diversified position in gold, copper and other base metals as well as in potential oil acreage.

How To Read Stock Charts

INDEX OF GROWTH: The rate at which the value of the equity behind the stock is doubling as determined by the growth rate at which it entered the year. A figure of 5.6 for the present year would indicate that at its current growth rate the equity value is doubling every 5.6 years.

PRICE RANGE: The annual high, low and mean price. Monthly ranges for the current year.

UNDERVALUATION AND OVERVALUATION PRICE LEVELS: Shown by the narrow horizontal lines above and below the stock's price range indicating price at which the particular stock is adjudged as underestimating or overestimating its future rate of growth. A stock showing a fast-growth rate will sometimes anticipate growth by two or three years. In this case it may not be so attractive a purchase relatively as some other fast-growing stock that is not anticipating its growth beyond the immediate present. Other factors such as rate of growth and investment quality will also enter into the comparison an investor will want to make.

Without these UV and OV levels, a current quotation of say, 55 or 75 would carry no significance regarding long-range value. The UV/OV levels also permit judgment as between one stock and another. They are not designated points of purchase or sale nor do they attempt to show what will be a stock's bottom or top figure in any given year.

RATE OF GROWTH: the rate as based on Nestor's tests at which the company is showing underlying or long-term growth. This will determine the price trend of the company's common stock over a period of years and in most instances the trend of dividend payments.

**Background and principles behind the selection by Nestor were discussed in a special article in The Financial Post., Jan. 10, 1953. A limited number of reprints are available on request.*

Noranda

Noranda Mines at its recent price of $61¼ is 66% above its UV level ($37) and could rise another 8% before reaching OV level ($66). Yield is 3.27% based on annual dividend rate of $2. Stock is selling at 18.5 times its 1955 earnings of $3.31 a share. Price range for 1956 to date is a high of $66⅝ and low of $51½.

Net profit in the first six months of this year rose nearly 25% to $8.9 million or $1.99 a share, from $6.7 million or $1.49 in January-June, 1955.

Metal production and investment income totaled $19.5 million vs. $15 million in the corresponding 1955 period.

A substantial interest in **Bouzan Mines Ltd.**, with options to purchase further shares, has been acquired by Noranda. A drilling campaign is under way on the main Chibougamau property.

Company is doubling the capacity of its sulphuric acid plant at Cutler, Ont., to meet additional requirements of mines in the Blind River area. By next June, capacity should be 1,000 tons daily.

Gaspé Copper Mines, a subsidiary, is experiencing difficulty in maintaining peak production in the face of a continuing shortage of miners in the Gaspé area.

Copper prices have not changed since the current price of 39¼c lb. was set July 10, although there are signs of a growing shortage. Production in Rhodesia has been reduced, the U.K. Board of Trade has reversed its announced intention of selling some copper from its stockpile, and the Suez crisis has generated increased buying.

These Are Forest Industry's Six Goals For Future Growth

Governments and forest industries across Canada should work toward six broad objectives to expand the base of the forest product industries, A. C. Price, chairman of the Canadian Pulp & Paper Association, told the National Forestry Conference in Winnipeg this week. Here is a digest of his address:

By A. C. PRICE
President, Price Bros. & Co., and chairman, Canadian Pulp & Paper Association

Government policies should be designed to encourage the further development and growth of this great resource on which Canada's prosperity so largely depends.

This involves much greater federal and provincial interest and co-operation in forest management directed toward six broad objectives:

- The completion of forest inventories and the development of greater knowledge of our forests and forest growth;
- The delineation of forest lands;
- Security of tenure to those leasing the forests;
- The construction of roads that would protect and benefit our forests in so many ways;
- Taxation structures that would encourage lessees and private owners to grow more wood;
- Introduction of modern operating regulations in keeping with the progress which has already been made in forest management.

We are not entirely inexperienced, unequipped or unprepared to meet the demands of the future. The former cut-and-get-out operation has been replaced by scientific, long-term working plans that assure wood in perpetuity on the basis of the present demand and cut.

The forests cannot be brought to their full potential as long as forest operations are governed by legislation, taxation and regulations that are out of date. Virtually all these were designed to meet the old-fashioned concept of forest liquidation rather than forest management; and virtually all are out of step with actual practice in the woods today.

Guarantee of Tenure

The over-all productivity of the forests can be increased only by effort on the part of the owners, namely, the people of Canada. The tenants have already done much. They are proceeding to do more. But there is a point beyond which they cannot go unless they have a guaranteed certainty of tenure.

Unfortunately, this certainty of tenure does not exist, and too frequently in the past have operators made an investment in the conservation and maintenance of a forest tract only to have it taken away and not infrequently granted to colonists who, owing to the nature of the soil, can obtain at best only a sub-marginal livelihood.

The forest industries do not suggest that the governments should do their forestry work for them. They are not asking for subsidies, guarantees, cash or any other hand-outs. All that is suggested is that the owners and landlords of the forests should exercise the same care and thought for the morrow as is exercised by any other property owners, be it of a farm, a factory, or an apartment house.

The Federal Government receives direct tax revenues from the forest industries of about $200 million a year, but expends only about $10 million annually on this remarkable resource which accounts for a third of all our primary wealth . . . There is, unfortunately, a similar but less startling imbalance in forestry expenditures on the part of the provinces.

Where, then, should governments act to assure not only more productive forests but also to assure increasing tax revenues ultimately from forest operations?

Tax Structure

The first area in which action might be taken lies in some modification of the tax structures. Unfortunately, taxation methods at present often discourage improved forest management on the part of the owners. Indeed, in many places, it pays an owner of good property to denude it completely. Thus he pays lower taxes. Taxes should be of a nature to encourage him to produce wood in perpetuity.

The tax situation works special hardship on the small woodlot owner to whom Canada must look for greatly increasing supplies of wood. Woodlots are of importance because they are adjacent to the consumer and because trees generally grow more quickly on woodlots than in the other forests.

Yet here again we find an anomaly. The forest industries are doing much to encourage the Tree Farm Movement — yet local taxation tends to discourage improved woodlot management. Moreover, in many instances no income tax deductions are permitted for expenses incurred in establishing and maintaining a woodlot.

The objective, therefore, should be to obtain taxation structures that would increase government revenues through an expanding forest growth and production. At present, the sole aim sometimes seems to be to make a fast buck for the tax collector.

Some progress has been made, but we must continue to urge the completion of our forest inventories and steps leading to a more complete knowledge of the productive potentialities of the forests. Fortunately, at least some of the provinces are far advanced in the compilation of their forest industries.

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MARKET COMMENT

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Business Stays Bright Say Purchasing Agents

Business continues very active with supplies of most goods sufficient to meet demand. Here and there prices are edging higher. Steel is still tight with most buyers eager to take full allocations. Heavy construction is a big prop in the current business picture. These are a few of the highlights of the September report of the Canadian Association of Purchasing agents.

Business Trends: Canadian industrial production continues at a high level. Retail trade holds up well, total for the first six months being about 8% above the first half of 1955. Personal income stays steady—a good sign of inherent health.

The principal prop under the economy is still capital expenditure. Construction contracts awarded to the end of July were 24% over one year ago. Interest rates have risen steadily in an effort to slow demand, but the effect of this action may be nullified by the attraction to foreign capital exercised by such high rates.

Labor: Canada and U. S. have not experienced a 100% "Automation" strike but the subject is a major grievance, and of serious concern when negotiating new contracts. A few labor leaders realize they cannot stand in the way of progress if we are to have prosperity, and have accepted the fact that workers, displaced by machines, have generally found other jobs, and that there is little cure for unemployment caused by loss of markets.

Construction Materials: Heavy construction projects such as the Seaway and hydro development, office buildings, factories and road work have substantially increased over the 1955 figures. Housing has been greatly curtailed, especially in the Toronto area due to reduced credit and increased interest rates.

Prices have remained fairly stable with exception of the interim freight rate increase of July 1 and increase in steel. Asphalt supplies are adequate; cement a little easier; bricks 2-3 months delivery.

Gravel, gypsum, crushed stone, sand, easy. Spruce and jack pine is adequate. Structural fir easy from yards but spotty in carloads from coast and prices hardening. Paints, vitrified, clay and cast iron pipe and small tools are all in good supply. Steel is drastically curtailed except for reinforcing bars.

Metals—Non-ferrous:

Aluminum world demand has eased slightly but the Canadian situation is still fairly tight and probably not until 1957 will this situation be alleviated. Domestic rolled goods are taking 15-20 weeks but tonnage is not restricted.

Copper: It looks as though U. S. producers will try to hold to 40c. a lb. for some time but London dropped as low as 33c. in July. The Suez troubles stiffened it for a while but more recently weakness has developed. A fourth quarter pick up in demand is expected in U. S. but there is no basis which warrants expectation of price strength.

Lead: Demand is fair, having improved in last few weeks and the present 15½c. is considered stable with some underlying strength from U. S. Government purchases.

Zinc: Like lead, demand has recently picked up and will improve in the next few months but delivery is easy. Price stable at 13½c..

Metals: Ferrous

Over-all world steel demand continues to tax producing units to the utmost. U. S. strike brought an average increase of $8.50 a ton . . . and it is hoped three years of tranquillity. Canadian markets advanced $6 to $7 but a strike was avoided by a 2-year union contract. Most buyers are quickly taking their allocated tonnage but some are holding off until a time closer to fourth quarter to determine more closely their inventory position. Production has held up well through the summer.

Bars: Book open for November to December rolling cycle. Orders against allocation must be available to one mill by Sept. 15 at latest. Plate: Books open for fourth quarter. Holding strictly to allocated amount. Sheets: hot rolled, cold rolled and porcelain enamelling books now open for fourth quarter with tonnages allocated. No lack of orders anticipated. Limited tonnage of British material offering. Structurals: none floating around. Scrap: Canadian scrap market is exceptionally strong with new all-time highs being recorded. Demand throughout the fourth quarter and into first quarter of 1957 should remain high with prices at current levels or slightly higher.

Chemicals: Prices generally are edging upward with some notable exceptions, e.g., anhydrous ammonia. Industrial acids: supplies adequate to meet steady demand. New sulphuric acid capacity at Shawinigan Falls due to go into operation early in fourth quarter. Plans have been announced for construction of plant to manufacture anhydrous hydrofluoric acid at Valleyfield.

Ammonia—anhydrous: Some supplies still being drawn from U. S. sources. A new Canadian plant in Eastern Ontario is scheduled to go on stream in October. Another manufacturer is considering the erection of an ammonia plant at Hamilton. Price presently $80 a ton.

Caustic soda and chlorine: Importations of caustic are still required. Chlorine supplies fully adequate to meet demand, with some export taking place. Price increases under way.

Glycerine: Has been in very free supply of late with prices headed downward largely due to increased synthetic capacity in U. S.

Food: The fresh fruits available for processing in Canada have been somewhat disappointing this year. Estimate of crops available show pears, plums, peaches, cherries, strawberries, raspberries and grapes all off from last year.

Paper: Production of Canadian wood pulp continues at a high level. Prices and markets are firm for the third quarter. It is estimated that 1958 capacity will be one-third higher than 1955.

Boxboard: kraft linerboard and boxboard has improved to some extent over the earlier part of the year. Two-four weeks delivery can be depended upon generally.

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The new Max Factor Toronto office-factory photo by PANDA

An example of Complete Service

July 1955: Representative from Max Factor, Hollywood, called on Camston Ltd. and outlined requirements. Satisfactory tentative price was quoted by Camston. Camston assisted in selecting suitable site.

August: Having worked with architects and consulting engineers in co-operation with the local representatives of Max Factor, Camston's representative arrived in Hollywood with complete architectural, structural, mechanical and plant layout drawings and specifications. Max Factor were satisfied with design and contract signed.

September: Work commenced on site.

January 1956: Building was handed over to owners who expressed wish to duplicate design of the building in other countries where construction is planned.

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Your Policy Can Make, Break Men

(Continued from page 28)

people. Just manage them right. This is so important, because it puts the full responsibility for the development of people in your organization directly on the shoulders of the line managers.

You cannot carry out a management development program by hiring a specialist and saying: "You do the development, I have a shop to run!"

It's all part of the attitude that because everyone else is getting research study in management, we ought to do it too. But it's no good if it's received with the attitude "Don't bring that stuff in here—we've got a shop to run." That isn't the thing to say the morning after the boys have been all worked up and inspired the evening before at a special sales meeting.

We in G.E. sent a man at high level to Harvard. It's a good place to send people, let me tell you. While he was away, he was re-organized and was put under an unsympathetic vice-president.

When he got back, the v-p said "Now, John, I know you've been to Harvard, I know it's intellectual up there, but don't bring any of it in here, we've got a shop to run, we've got no time for frills." He had a nervous breakdown.

He learned things to be done to help his company, he saw all sorts of things that were being done wrong, but when he got back he was held back by his manager.

The development of people is not something you can do by hiring a specialist. The basic research must be done by the line manager and development of people must become part of the operating philosophy of the company.

What counts is the basic, deep-down relationship between a manager and his men. Get away from this idea that we are the inspirers and needlers of our people.

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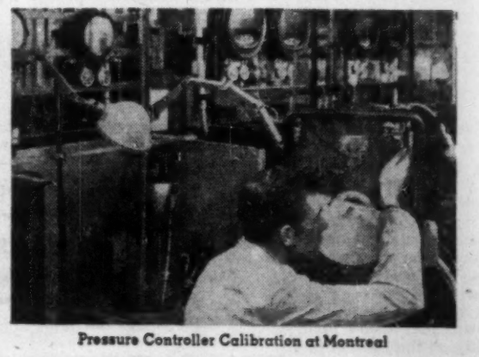

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J. H. BURGAR,
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NOTICE

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R. H. L. MASSIE,
Chief Agent in Canada.

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John J. Kilgour,
Chief Agent.

INTERNATIONAL NICKEL CO. OF CANADA had 185,530 preferred shares, $100 par; and 1,814,965 preferred shares, $5 par; outstanding at Sept. 6.

More Money and New Rules

CPR Head Talks About Future of the Railways

Canadian and U. S. railways will need large capital investments and changes in the government regulations if they are to continue to play their "proper part" in the economy. That was the opinion expressed by N. R. Crump, president of the CPR, in an address to the Treasury Division, Association of American Railroads, in Quebec this week. Here is a digest:

By N. R. CRUMP
President,
Canadian Pacific Railway

Economic growth, competition and technological change, for the railway industry, inexorably suggest that money—large capital investment—is going to play a role of unparalleled importance if railway transport is to play its proper part in the economic life of our two countries.

The greater the tempo of economic activity, the more intense does competition become—particularly in the realm of transportation. Under a steadily mounting tempo of economic activity, the demand for transportation must inevitably increase. If the railway industry is to meet that demand, and perform its proper service function in a growing economy, it must be able to attract the necessary capital for improvement and expansion of its plant and equipment.

Regulation which inhibits the making of price adjustments which are required by the realities of the competitive situation in transportation is the hub of the problem confronting railway transport both in Canada and in the U. S. So long as this problem remains unsolved, shippers whose traffic falls within the area of so-called competitive rates will take full advantage of the ceiling on rates imposed by such competition. Shippers whose traffic falls within the so-called non-competitive segment—non-competitive because rates are regulated—will rely on regulation to keep their rates down.

The railway industry, being the over-all common carrier and the regulated carrier, is caught in the squeeze.

Urges Changes

Recognition of the nature of the problem is found, insofar as the U. S. is concerned, in the exceptionally timely and penetrating report of the President's cabinet Committee on Transportation.

It is, I think, fair to say that

N. R. CRUMP

there is also a growing recognition of the nature of the problem in Canada. The final solution, so far as Canada is concerned, I believe, lies in substantial relaxation of regulation for the railways and in a policy of fair and minimum regulation for the transportation industry as a whole that will allow each transportation agency equality of opportunity to develop in accordance with its relative ability to meet the demands of customers—both service-wise and price-wise. Only thus can the railway industry secure revenues sufficient to meet expenses and to provide an adequate return on investment sufficient to attract new capital.

Return on investment in the railway industry depends not only on increasing the volume of railway transport business, but in taking full advantage of technological change so that the cost of producing the service may be lowered and the quality of the service improved.

The word "automation" is no stranger to the vocabulary of railway management either in Canada or in the United States. In fact, I think it is fair to say that few industries are more keenly aware of the challenge and the opportunities presented by technological change than are the railways of our two countries. Diesel motive power is but one of the more obvious ways in which the railway industry is seeking to take advantage of the economies and the improvement in service which can flow from technological advances. There are many others.

A responsibility shared by management, organized labor and government alike is to see to it that the golden promise of technological advance, the benefits of which must inevitably be reflected in more efficient, economical transportation, is realized in an orderly fashion, and not impeded by those who, for reasons of their own, profess to fear rather than to welcome progress.

The Inflation Threat

The steady tightening of monetary policy indicates that central banking authorities in both our countries are keenly aware of the inflationary potential which is particularly menacing in a period of over-full employment. And in Canada, as in your own country, official pleas for "restraint" in spending have become increasingly common.

No prudent person would wish to minimize the necessity for "restraint" which Canada's Finance Minister, Hon. Walter Harris, has voiced on more than one occasion in recent months. Restraint, however, can hardly be expected to serve as an effective anti-inflationary brake unless it is exercised by all groups in the economy, including public spending at all levels of government.

In Canada, official appeals for restraint have thus far been directed exclusively to the business and industrial sector of the economy. Yet one may be forgiven for wondering, in the light of recent figures on labor income issued by DBS, whether the greatest inflationary threat does not in fact lie in the wage spiral itself.

Figures on labor income show a rise of $652 million in the first six months of this year, as compared with the corresponding period of 1955, and DBS points out that only slightly more than half of this rise is attributable to increased employment. Thus, it follows that wage increases in the first half of the year cost some $300 million, and the higher wage bill, running at the rate of $50 million a month above 1955, will be substantially greater for the second half of the year.

Labor income figures, together with the fact that the consumer price index and the wholesale price index have been edging steadily upward in recent months, despite a record inflow of imports—which are supposed to be an effective means of easing inflationary pressure—suggests clearly that inflation is something to be reckoned with in the present economic climate in Canada.

FOREIGN INSURANCE COMPANIES ACT
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LESLIE PHILLIPS,
Chief Agent for Canada.

Company Reports

To assist readers in appraising and comparing company financial statements, The Financial Post has a uniform method of presenting corporation accounts. Variations from the companies published reports are footnoted.

Steel Products

CRAIG BIT CO., North Bay, Ont., net profit for the year ended June 30, 1956 climbed 48.8% to $96,148 ($64,634 in previous year).

Gross sales increased to $1,327,056 ($1,046,153), reports President J. A. Drain.

Expenditures for new equipment and improved facilities during current year amount to $29,592 and present plans call for further expenditures.

INCOME ACCOUNT

Years Ended June 30:	1956	1955
Net earnings†	$170,898	$114,634
Less: Inc. taxes	24,750	50,000
Net profit	96,148	64,634
Less: Divids.	34,800	8,700
Surplus for year	61,348	55,934
†After depr. & amort.	44,054	45,961
Earnings per Share and Dividend Record:		
Common	$0.53	$0.56
Paid	0.30	0.075

CONDENSED BALANCE SHEET

As at June 30:	1956	1955
Cash	$95,312	$85,803
Accts. rec., less res.	125,211	211,416
Inventories	434,596	326,703
Total curr. assets	655,121	603,922
Prep. exp.	34,332	33,026
Fixed assets*	280,430	287,064
Other assets	17,049	20,804
Total assets	986,932	944,816
Accts., tax., etc., p.	155,177	174,409
Divds. payable	8,700	8,700
Total curr. liabs.	163,877	183,109
Capital stock	180,214	180,214
Earned surplus	642,841	581,493
*Alfred depr. of	421,334	385,108
Working capital	491,244	420,813

Bakeries

CANADA BREAD CO., Toronto, consolidated net profit for the year ended June 30, 1956 was 13.3% lower than in previous year ($306,345 against $353,320).

The cost of labor, as well as cost for most ingredients and supplies, has risen markedly and consequently narrowed the profit margin, reports President D. A. Ross.

Company has organized a consumers' service and quality control department.

Canada Bread says it has succeeded in selling a wider range of products and expects further success in current year.

CONS. INCOME ACCOUNT

Years Ended June 30:	1956	1955
Net earnings	$1,238,394	$1,378,007
Less: Depreciation	863,664	672,113
Bd. & note int.	174,136	193,174
Bd. disc. & exp.	7,249	7,400
Inc. tax	87,000	152,000
Net profits	386,345	353,320
Less: B pref. divds.	62,500	62,500
Common divds.	20,000	20,000
Surplus for year	223,845	270,820

*As a result of claiming for tax purposes depreciation in excess of amt. shown in the accounts, net profit was increased by approx. $91,000 in 1956 and $112,127 in 1955.

Times Bond and Note Interest Earned:		
Before deprec.	7.11	7.13
After deprec.	3.30	3.65
Earnings per Share and Dividend Record:		
B pref.*	$12.25	$14.13
B pref.†	6.98	7.92
Paid	2.50	2.50
Common†	0.66	0.78
Paid	0.10	0.10

*Before (after) participation.

CONDENSED CONS. BALANCE SHEET

As at June 30:	1956	1955
Cash	$602,697	$611,540
Accts. rec. less res.	470,653	403,379
Inventories	862,943	737,972
Total curr. assets	1,936,293	1,752,891
Prep. ins., etc.‡	150,944	128,580
Fixed assets*	6,024,422	6,066,515
Bond disc., exp.	62,173	69,421
Total assets	8,173,831	8,017,407
Accts., etc., pay.	7,335,122	1,206,906
Income taxes	82,439	110,143
Divd. pay.	35,625	35,625
Total curr. liab.	1,639,186	1,352,766
Funded debt	2,830,000	2,890,000
Def. liab.	705,245	1,019,066
Capital stock	1,275,000	1,275,000
Surplus	1,704,400	1,480,555
*After depr. of	4,987,518	4,535,353

‡Incl. in curr. assets in co.'s report.

Working capital	277,107	400,125

Bank Staff Changes

Toronto-Dominion

G. A. MARINI, assistant accountant, St. Clair & Christie, Toronto, to be accountant at that branch.

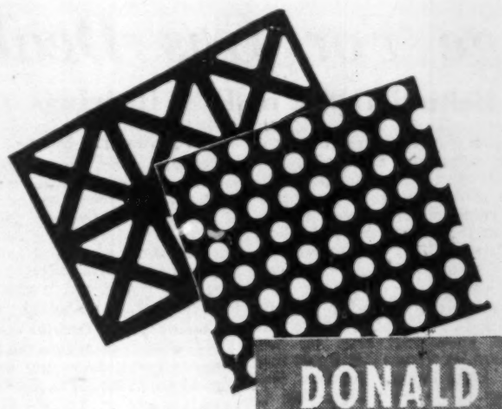
D. COUPLAND, assistant accountant, City Hall branch, Toronto, to be accountant, Queen & Victoria, Toronto.

N. A. PATTERSON, assistant accountant, 1210 S.W. Marine Dr., Vancouver, to be accountant, Hastings & Burrard, Vancouver.

J. R. MARTIN, assistant accountant, Kingsway & Joyce, Vancouver, to be accountant, Lake Cowichan, B.C.

A. T. McKENZIE, assistant accountant, Victoria & McVicar, Fort William, to be accountant, Wartford branch, Fort William, Ont.

D. B. WINDSOR, second assistant accountant, Swan River, Man., to be accountant, Grandondell, Alta.



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D During the life of the policy, through power equipment inspection service by Boiler Inspection Field Inspectors skilled in detecting conditions which might cause accidents;

A After an accident (if one should occur) through prompt, efficient, on-the-spot help in rehabilitation, and equitable settlement of claims.

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Setting Stage For Gas Deal?

The Real Reason Behind Delay in FPC Hearings

(Special Correspondence)

WASHINGTON, D.C. — The **Tennessee - Midwestern** applications to export and import natural gas to and from Canada have gone a little deeper into Washington's legal jungle: hearing on motions to toss out the applications has been completed.

FPC Examiner Francis Hall, who heard the direct evidence last spring, held a one-day hearing this past week on motions filed by opposing natural gas companies to throw out the Tennessee-Midwestern applications on the Canadian gas.

The motions, which in all likelihood will be rejected by the FPC, were filed strictly as a delaying gimmick. The opposing companies hope it will delay the hearing on the applications for a total of three or four months. Examiner Hall must study the evidence given this past week, plus the 6,301 pages of evidence given last spring, and then make his recommendation to the Commission. After more time for more delaying arguments, the Commission will make its decision. This decision, however may not come until about the beginning of 1957. Then, and only then, can the FPC get back to continuing the hearing on the original applications.

During the course of the one day session on the motions to dismiss, spokesmen both for and against, expressed confidence that the **Trans-Canada** pipeline was going to be built regardless of what happens in this FPC hearing. This confidence about the building of the pipeline across Canada was not evident at the spring hearing. Examiner Hall went into detailed study of the present financing of Trans-Canada.

Profit Lies in U. S.?

Officials of the Trans-Canada firm expressed a firm belief they could finance the pipeline without sales to United States. One official of the company told The Financial Post, "Yes, we expect to finance the line on just Canadian markets. We feel today we can go ahead with it."

Some measure of hesitation in the official's words, however, indicated if Trans-Canada is to show much of a profit, that profit will have to come from sales in the American market.

At the hearing, Tennessee-Midwestern were accused of planning to "raid" markets of other companies. This was vigorously denied. There also was considerable argument against the Canadian gas coming into U. S. on the grounds it would make some areas of the U. S. dependent upon foreign gas.

It is quite apparent, however, all the legalistic, bureaucratic shenanigans at the hearing are strictly stalling tactics. It is felt that even if the motions to dismiss are thrown out, as is expected, the opposing companies will mark it down as a victory because they will have delayed the case three or four months. The longer the delay, the better they like it, for the time being.

The coal association lobbyists would like to see the case delayed forever. They don't like the idea of Canadian natural gas getting to Ontario and replacing American coal. But the opposing natural gas companies have different reasons for delaying, and in addition, they don't want unlimited delay.

Argument on Distribution

This whole case before the FPC seems to break down into an argument about who is to distribute Canadian gas in United States. Although much is made of "foreign gas" entering the American market, the opposing natural gas companies are not worried about that. They simply want to handle the Canadian gas themselves.

Failing that, they want to make a deal with Tennessee-Midwestern to share the distribution. They want the case delayed just long enough so that Tennessee-Midwestern will get disgusted and be willing to listen to talk of a deal to share the Canadian gas distribution.

There seems to be a feeling here that eventually some kind of a deal may well be the answer. No one on either side will admit this will happen, but observers, not connected with Tennessee-Midwestern or the opposing companies, figure a deal is a strong possibility.

"I've seen it time and again where these companies fight each other almost to the death, and then quietly go into a hotel room, make a deal and come out breathing sweetness and light," one observer here commented.

Another observer has suggested both sides are simply jockeying for positions when the time comes to talk a deal.

When and if the day of a deal arrives, chances are it will have almost clear sailing through the FPC. Probably then, the only opponents will be the coal lobbyists who will be in opposition from now 'til doomsday. The day of a deal, however, likely will not be this year and may be well into 1957 if it comes at all.

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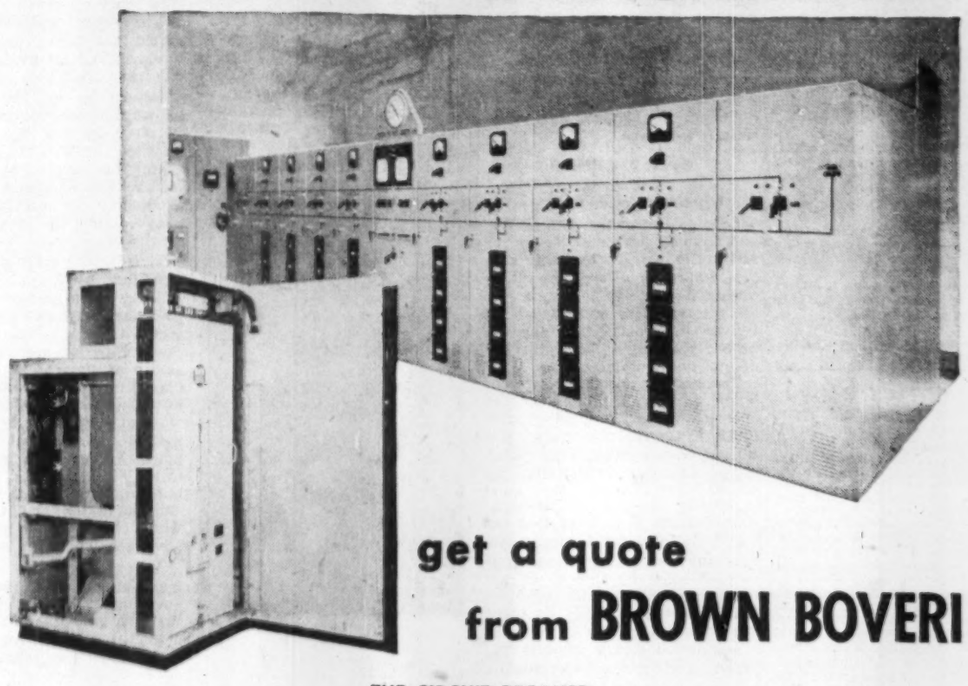

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FP-6-10

Company Reports

To assist readers in appraising and comparing company financial statements, The Financial Post has a uniform method of presenting corporation accounts. Variations from the companies' published reports are footnoted.

Mining

PAYMASTER CONSOLIDATED MINES reports a net profit of $55,117 in the year ended June 30, 1956, compared with a loss of $27,256 in the previous year.

Bullion produced had a gross value of $1,494,242, up from $912,934 in 8½ months of production in the previous fiscal year. Ore reserves were up 27,087 tons from 524,220 tons at the end of the previous year. Grade was unchanged at .249 ozs. per ton.

Company optioned a 66-claim group in Cleaver township where an electromagnetic survey is being conducted. It is also participating equally in 28 claims staked in Rattray township.

INCOME ACCOUNT

Years Ended June 30:	1956	1955
Bullion prod.	$1,494,242	$912,932
Less: Oper. exps.	1,698,186	1,073,984
Oper. loss	203,944	161,052
Add: Est. Cost-Aid	296,193	141,841
Other inc.	42,452	38,998
Less: Deprec.	73,666	39,901
Deferred costs w/o	2,701	.....
Prov. min. tax	3,215	.....
Devel. w/o	.....	7,142
Net profit	55,117	†27,256
Less: Divds.	129,439	.....
Deficit for year	74,322	27,256
Earned per Share	$0.006	d$0.003
Paid	0.015	nil

†Loss.

CONDENSED BALANCE SHEET

As at June 30:	1956	1955
Cash & bullion	$337,059	$570,931
Stock & bonds*	701,053	514,275
Est. Cost-Aid	136,007	67,295
Accts. rec.	923	3,249
Supplies	113,436	104,400
Total curr. assets	1,308,478	1,260,153
Prep. & def. chgs.	42,724	31,951
Shs. in other cos.	694,361	692,211
Mining prop.	2,487,994	2,487,994
Plant & equip.^	348,864	346,008
Total assets	4,882,421	4,818,317
Total curr. liab.	134,397	107,249
Capital stock	4,514,033	4,514,033
Surplus	233,991	197,015
^After depr. of	2,135,229	2,061,561
*Market value	1,193,867	804,873
Working capital	1,174,081	1,152,884

Manufacturing

R. & M. BEARINGS CANADA LTD., Montreal, net profit for the year ended June 30, 1956 soared 70.8% ahead to $65,103 ($38,127 in previous year).

Sales rose by 18% to the highest level in company history, reports President H. Little.

INCOME ACCOUNT

Years Ended June 30:	1956	1955
Gross trade profit	$485,924	$395,340
Net earnings	114,356	80,529
Less: Deprec.	7,453	7,602
Income tax	45,800	23,800
Net profit	65,103	38,127
Less: Cl. A divds.	8,400	8,400
Cl. B divds.	7,200	7,200
Surplus for year	49,503	22,527
Earnings per Share and Dividend Record:		
Class A†	$9.30	$5.45
Class A*	1.30	1.30
Paid	1.20	1.20
Class B†	9.57	5.07
Class B‡	9.33	4.84
Paid	1.20	1.20

†Before (latter) participation.
*Maximum available in year under participation clause.

CONDENSED BALANCE SHEET

As at June 30:	1956	1955
Cash	$38,435	$72,941
Accts. rec. less res.	356,861	221,789
Inventories	376,547	292,482
Total curr. assets	769,843	587,572
Prepaid exp.	4,027	3,880
Fixed assets*	52,863	55,706
Total assets	826,733	647,160
Accts., etc., pay.	244,650	127,795
Taxes pay.	35,472	22,237
Total curr. liabs.	280,122	150,032
Capital stock	10,000	10,000
Earned surplus	526,631	487,128
*After depr. of	52,258	45,030
Working capital	489,741	437,540

Transportation

TORONTO TRANSIT COMMISSION net loss for 1955 was $2,308,563, 2% lower than net loss of $2,355,920 for 1954.

Improvement was due to full year's revenue from zone fare system (introduced in July 1954) which produced nearly $2 million additional passenger revenue compared with previous year. However, higher volume was largely offset by greater expenses—mainly a $724,527 rise ($3,567,557 vs $2,843,030) in depreciation and a $567,375 increase ($2,341,379 vs $1,774,004) in debenture and discount expense charged to operations. These increases were largely a reflection of full year's subway operation in 1955 compared to only nine months in 1954, company says.

Other expenses were held close to previous year, despite 1,184,000 more miles operated. Severe economic restrictions necessary in some cases prevented TTC from meeting all service demands.

Island ferry service showed a $207,406 loss ($181,060 loss) and carried 1.2 million passengers, a 39.6% drop from previous year. Adult fare was reduced to 10c from 30c early in 1955 because of a $33,000 subsidy from the City of Toronto. Service is faced with a steady decline in number of passengers and mounting operating costs, it is stated.

Gross debt amounted to $72,498,812 at year end. Cost of servicing capital debentures was $4,081,000.

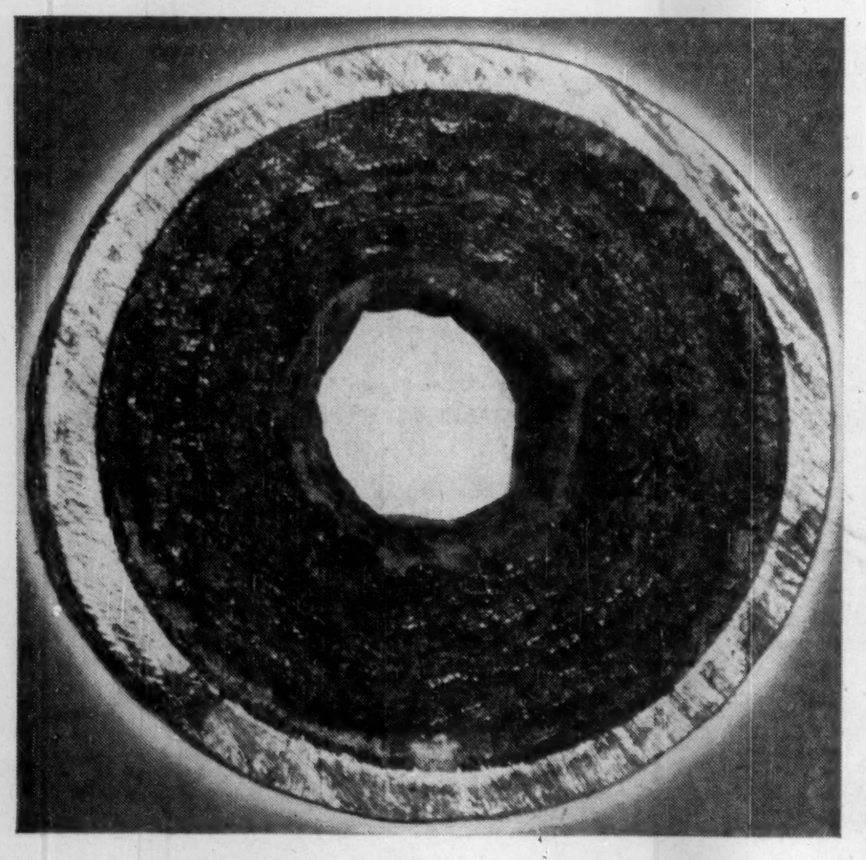
Ontario Municipal Board in June 1954 approved provision of $13 million by Municipality of Metropolitan Toronto to TTC for expenditures. By end of 1955 there remained $5,450,000 but TTC expects to use balance by end of 1956.

Metropolitan Council recently approved a $2.3 million grant to company on account of losses suffered during extension and reorganization.

Total cost of capital assets owned by company increased to $140,468,407 ($139,482,279). Capital additions cost $3,368,681 and retirements $2,382,553. Major additions included $1,374,000 for 79 motor buses (14 of which were transferred to **Gray Coach Lines Ltd.**, a subsidiary, as they were fully depreciated), $355,000 for track replacement, and $542,000 for purchase of six new subway cars.

TTC has sold its present head office for an attractive price and is building a new head office on site occupied by Davisville station. The net result shows a substantial financial gain, although part of station building had to be removed, it is stated.

TTC continues to advocate construction of additional subway lines. However, it cannot finance cost of such construction and feels capital charges on present Yonge St. subway should be borne by the Metropolitan Corp. and necessary legislative authority applied for.



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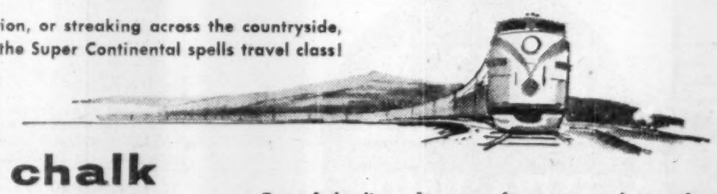

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Unlisted Stocks

(Compiled by Intercity Securities Corporation Limited, Toronto)
Sept. 17, 1956.

	Bid	Asked
Algoma C. & H.B. Rly. com.	31.00	33.00
Do. pfd.	1.50	....
Allens Toronto, units	43.00	....
Anglo Can. Telephone, A	29.00	29.75
Bowater Ltd.	5.90	6.10
Bowes Ltd., 1% pfd.	.75	.90
Brinton Peterboro Carpet	51.00	....
British America Assce.	120.00	127.00
B. C. Sugar	32.00	34.00
B. C. Telephone, 4½% pfd.	95.00	97.00
British Mortgage & Trust	215.00	225.00
Can. Crushed Stone, 6% pf.	96.00	101.00
Can. Cons. Grain, common	5.00	8.00
Do., units	85.00	....
Can. Delhi Pete	7.75	8.25
Can. Foreign Securities	12.75	....
Can. Insurance Shares	100.00	....
Carlton Club	135.00	....
Cawthra Apts.	37.00	....
Chase, Dr. A. W., common	1.75	2.25
Colonial Steamships com.	200.00	....
Commercial Finance	48.00	....
Concourse Bldg., v.t.	53.00	....
Crain, R. L., pfd.	.80	....
Crown Life Insce.	146.00	152.00
Crown Zellerbach Canada	24.50	25.25
Debentures & Secs., 5% pfd.	92.00	97.00
Detroit Internat. Bridge	18.50	20.50
Dom. Can. Gen. Insce.	80.00	....
Dominion Life	1400.00	1650.00
Dom. Linseed Oil, pfd. & com.	2.75	....
Dover Industries	10.50	11.25
Eastern Canada Savings	20.25	21.50
Eastern Trust Co.	30.00	33.00
Essex Packers common	2.00	3.00
Do., pfd.	40.00	44.00
Goderich Elevator	23.25	24.00
Granite Club	14.25	....
Gt. Britain & Can. Inv. com.	14.25	15.00
Do., pfd	117.00	....
Great Lakes Power com.	18.75	20.00
Great-West Life Assce.	265.00	275.00
Guar. N. Amer., fully paid	400.00	425.00
Do., 20% pd.	86.00	....
Halifax Insce.	15.50	16.50
Halton & Peel Trust	10.00	11.00
Highland Dairy Pfd.	40.00	....
Homewood Sanitarium	90.00	....
Hudson's Bay Co.	27.00	28.00
Humber Amusement Pier	.35	.50
Humberstone Shoe	8.25	9.00
Industrial Mtge. & Trust	77.00	83.00
Ingersoll Machine, 4% pfd.	85.00	90.00
Do., B	5.00	6.00
Inland Natural Gas	7.00	7.75
Jenkins Bros., common	64.00	68.00
Lambton Golf Club	325.00	....
Lambton Loan Sarnia	80.00	84.00
Lawson & Jones 1% pfd.	.75	....
Lond. Can. Inv., $3 pfd.	48.00	52.00
Do., A	42.50	46.00
London Life Insurance	180.00	200.00
Lord Simcoe Hotel, A	3.50	4.25
Manufacturers Life	240.00	260.00
Monarch Life, 60% pd.	290.00	....
Morrow Screw & Nut	40.00	....
National Life	340.00	375.00
Nat Sewerpipe, units	14.00	17.00
Niagara Lower Arch Bridge	64.00	....
Northern Telephone	4.20	4.50
Nova Scotia Trust	20.00	....
Oakville Wood 6% pfd.	87.00	93.00
Paramt. Oshawa Theatres	12.50	....
Park Lawn Cemetery	1.75	....
Phillips Electrical	17.00	18.00
Prairie Royalty Trust, units	2.50	....
Prudential Trust	16.00	18.00
Rapid Grip Batten, pfd.	98.00	102.00
Reliance Pete., A & B	23.00	....
Do., pfd	43.00	....
Robin Jones Whitman, pfd.	24.00	26.50
Royal Oak Dairy, B	3.25	....
Sherbrooke Trust	155.00	....
Sincennes McNaughton L.	3.00	....
Skyway Drive-In Theatre	1.40	1.70
Sovereign Life, 25% pd.	105.00	....
Standard Fuel, common	2.75	....
Do., pfd. $2.25	40.00	42.50
Summit Golf	15.00	25.00

Sun Life Assce.	265.00	275.00
Surpass Petrochemicals	1.50	1.53
Teleflex Ltd.	12.00	15.00
Thorncliffe Park	6.75	7.25
Toronto & London Inv.	2.75	....
Tor. Gen. Insurance	25.00	28.00
Tor. Medical Arts Bldg.	54.00	....
United Can. Shares	19.50	20.00
Waterloo Mfg.	7.00	8.00
Waterloo Trust	35.00	....
Westcoast Trans., V.T.	25.75	26.75
Do., units	148.00	152.00
Western Assce.	73.00	78.00
Western Life, 25% pd.	75.00	....
Wood Alexander, 6% pfd.	92.00	96.00

Corporation Bonds

(Supplied by Investment Dealers Assn. of Canada)
Sept. 18, 1956

Public Utility Issues	Int. Rate %	Due	Bid	Ask	Prev. Week Bid
Alg. Cen. H.B.R.	5	'59	143	146	149
Bell Telephone	3	'77	82	85	82
Do.	3¾	'79	91	94	91½
Bowater Pr. Co.	3¾	'80	87½	90½	89
Brazilian Traction L. & P.	4¾	'70	83	86	83
B. C. Electric	3½	'67	89½	92½	89½
Do.	3½	'75	88	91	88
Do.	3¾	'80	89	92	89½
Do.	4¾	79	99	102	100
B. C. Telephone	4¾	75	98	101	98
Calgary Power	3½	'72	91	..	91
Consumers' Gas	4½	74	92	95	92
Gatineau Pr. D	3½	'70	89	92	89
Gt. Lakes Pwr	4½	'75	94	97	93
Maclaren-Quebec Power	3	'69	87	90	89
Mex. Lt. & Pwr.	5	'75	87	90	88½
Nat. Lt. & Pwr.	4½	'61	97	100	96½
North. Que. Pr.	4½	'67	92½	95½	92½
Power Corp.	3½	'67	87	90	87
Quebec Power	3	62	91	94	93½
St. Maurice Pr.	3½	70	89½	92½	89½
Shaw W. & Pr.	3	'71	85	88	85
Do.	3½	'73	89	92	91
Wpg. Electric	3¾	'71	92½	95½	93
Industrial Issues:					
Abitibi Pr., P.	4	'74	94½	97½	94½
Acadia-Atlantic Sugar	4	'74	91	94	91
Alum. Co. of C.	4½	'73	97	100	98½
Bathurst P. & P.	5½	'73	98	101	98
B. A. Oil	3½	'74	87½	90½	87½
Burns & Co.	4	'63	95	98	96
Can. Bread	4½	67	90	93	90
Can. Cement	3¾	75	91	94	93
Can. Steamship	4	'66	95½	98½	95½
Cdn. Breweries	4¾	'79	99	102	99
Cdn. Canners	3¾	'70	90	93	90
Cdn. Celanese	3	'62	89	92	89
Cdn. Chem. Co.	5½	'71	94½	97½	96
Can. Industries (1954) Ltd.	3¾	'74	90½	93½	90½
CPR	3¾	'72	89½	92½	90½
Can. West. Lum.	4	'62	96	99	96
Cockshutt Plow	4½	'65	94½	97½	94½
Columbia Cell.	5	'68	97½	100½	97½
Dom. Fd. & Stl.	4½	'69	97	100	98
Dom. Stores	4½	'75	94½	97½	95½
Dom. Tar & Ch.	5	'67	97½	100½	99½
Dryden Paper	4¾	'74	95	98	98
T. Eaton Acc.	4¾	'74	96½	99½	97½
E. B. Eddy	4	'74	90	93	89
Elk Falls Co.	5	'75	97	100	97
Gen. Mot. Acc.	4	'64	94½	97½	94½
Gunnar Mines	5	'60	96	99	97½
H. Bay O. & G.	4	'75	88	91	91
Husky Oil	5	'69	89	92	90
Imp. Tobacco	3	'70	87	100	87
Imp. Oil	3¾	'75	90	93	93
Indust. Accept.	5½	'75	97	100	99½
Irving Oil Co.	5½	'67	97	100	96
Loblaw Groc.	4¾	'73	96	99	96
Maple L. M.	3¾	'63	91	94	91
Massey-Harris	5	'67	96	99	96
Monarch Knit.	4¾	'71	72	75	72
N. S. Stl., Coal	3½	'63	94	97	94
*Ont. Jockey Cl.	5½	'72	85	88	87
Price Bros.	3½	'66	93	96	93
Pronto Uranium	5	'60	96	99	97
St. Law. Corp.	5	'72	97½	100½	97½
Silverwood Dair.	4	'71	89	92	89
Simpsons Ltd.	4¾	'73	98	101	99
Simpsons-Sears.	4½	'79	96½	99½	97
Steel Co.	2¾	'67	90	93	90
Traders Finance	5½	'69	99	102	99
Union Accept.	5½	'68	96½	99½	96½
Un. Grain. Gr.	3¾	'70	87	90	87
Weston, Geo.	4¾	'68	96	99	99
*Ex. warrants					
CONVERTIBLE ISSUES					
Ajax Pete.	5	'62	87	91	88
Anglo Am. Exp.	5½	'75	98	101	98
Atlas Steels Ltd.	5	'67	116	120	122
Braz. Traction	4½	'71	81	84	81½
Can. So. Oils	5	'61	83	86	85
CPR	3½	'66	102	105	103
Do.	4	69	104½	107½	107
Cdn. Petrofina	4	'72	124	128	125
Cent. Leduc	5	'65	92½	95½	92½
Cockshutt Farm	5	68	89	92	89
Dom. Steel & C.	4½	'70	116	121	120
Dom. Textile	4	'66	91	94	91
Jupiter Oils	5	'67	89	92	86½
Kroy Oils Ltd.	5	'67	98	101	98
N. Concord Dev.	5½	65	91	96	91
N. Sup. Oils	5	'64	88	91	88
Pathfinder Pete.	3-5	'62	81½	84½	83
Phillips Elec.	5½	'70	108	112	108
Scurry Oils	5	'64	87	92	87
Silverwood Dair	5½	'72	105	108	114½
Trad. Finance	4½	'69	99	102	117
Trans Emp. Oil	5½	'67	96	..	98

Nickel-Copper Cobalt Property For Campbell Isle.

An 18-claim nickel-copper-cobalt property at Uchi Lake, 100 miles northeast of Kenora, has been acquired by **Campbell Island Mines & Explorations Ltd.**, the company announces.

Four trenches have been opened on one of the claims crossing the strike. Chip samples have given the following average assay results:

Trench No. 1, 19 ft. width, 2.06% copper, 0.49% nickel; 22.5 ft. width, 2.66% copper, 0.39% nickel and 0.07% cobalt. Trench No. 2, 25 ft. width, 1.44% copper, 0.30% nickel and .15% cobalt. Trench No. 4 gave values ranging from 0.20% to 0.71% copper.

Geological mapping, opening up trenches 1, 2 and 4 to determine limits of ore width, an electromagnetic survey and 15,000-20,000 ft. of diamond drilling have been recommended by A. S. Bayne, consulting engineer. Cost of this preliminary program is estimated at $75,000.

Record of Financing

Sales by Municipalities, Provincial and Dominion Governments, Offerings of Corporations and Securities.

DOMINION

Government of Canada Treasury Bills—Due Dec. 7, 1956, $135,000,000. Issued Sept. 6, 1956. Sold at $99.277 to yield 2.92%.

PROVINCIAL

Quebec Hydro-Electric Commission (Guaranteed by the Province of Quebec) — 4¼% series "O" sinking fund debentures, to mature Oct. 1, 1976, $25,000,000. Dated Oct. 1, 1956. Offered at $98.00 and accrued interest, yielding approximately 4.40% by L. G. Beaubien & Co. Limited, A. E. Ames & Co. Limited, Royal Securities Corporation Limited, Wood, Gundy & Company Limited, Mills, Spence & Co. Limited, Dominion Securities Corpn. Limited, McLeod, Weir & Company Limited, Bell, Gouinlock & Company Limited, W. C. Pitfield & Company Limited, Dawson, Hannaford Limited, Nesbitt, Thomson and Company, Limited, Greenshields & Co. Inc., Collier, Norris & Quinlan Limited, Gardner & Company Limited, Rene T. Leclerc Incorporee, J. C. Boulet, Limitee, Savard & Hart Inc., Mead & Co. Limited, Clement, Guimont, Inc., Midland Securities Corpn. Limited, La Corporation de Prets de Quebec, Cochran, Murray & Co. Limited, J. E. Laflamme, Limitee, MacTier & Co. Limited, Lagueux & Desrochers Limitee, Harrison & Company Limited, Bartlett, Cayley & Company Limited, Casgrain & Company Limited, Geoffrion, Robert & Gelinas Inc., Desjardins, Couture Inc., Grant Johnston & Co. Limited, Fry & Company, Brawley, Cathers & Company, James Richardson & Sons, Walwyn, Fisher & Co., Hamel, Fugere & Cie Limitee, Garneau, Boulanger, Limited Societe de Placements Incorporee, J. T. Gendron, Inc., Grenier, Ruel & Cie Inc., Matthews & Company, Oscar Dube & Cie, Inc., Laloie, Robitaille & Cie Limitee, H. C. Flood & Co. Limited, Canadian Alliance Corporation Limited, Gaston Laurent Inc., John Graham & Company Limited, Morgan, Ostiguy & Hudson Limited and Ramsay Securities Co. Limited.

MUNICIPAL

School Commission for Mun. of Asbestos, Que. — 4% debentures, due Sept. 1, 1957-61, $135,000. Issued Aug. 27, 1956. Sold at $97.03 to Oscar Dube & Co., Inc.

School Commission for Mun. of Ste. Monique-des-Saules, Que. — 4% and 4½% debentures, due Sept. 1, 1957-66-76, $115,000. Issued Aug. 27, 1956. Sold at $97.22 to Garneau, Boulanger, Limited, La Corporation de Prets de Quebec, J. E. Laflamme, Limited and Grenier Ruel & Co., Inc.

School Commission for Mun. of Ste. Anne-de-la-Rochelle, Que. — 4% and 4½% debentures, due Aug. 1, 1957-60-76, $85,000. Issued Aug. 28, 1956. Sold at $97.34 to La Maison Bienvenu, Ltee.

School Commission for Mun. of Ste. Fortunate-de-Wolfestown, Que. — 4% and 4½% debentures, due Aug. 1, 1957-58-76, $46,000. Issued Aug. 28, 1956. Sold at $95.00 to J. E. Laflamme, limited.

School Commission for Mun. of Laurierville, Que. — 4% and 4½% debentures, due Sept. 1, 1957-60-76, $132,000. Issued Aug. 29, 1956. Sold at $97.75 to J. E. Laflamme, Limited.

Town of North Sydney, Nova Scotia — 4½% 1-10-year debentures, $50,000. Issued Sept. 12, 1956. Sold at $97.03 to Nesbitt, Thompson & Company Ltd.

CORPORATE

Loblaw Groceterias Co. Limited — 4¾% sinking fund debentures, series D, to mature Oct. 1., 1976, $12,000,000. Dated Oct. 1, 1956. Offered at $100.00 and accrued interest by Wood, Gundy & Company Limited, McLeod, Young, Weir & Company Limited, A. E. Ames & Co. Limited, Dominion Securities Corpn. Limited, Royal Securities Corporation Limited, Greenshields & Co. Inc., W. C. Pitfield & Company Limited, James Richardson & Sons, Burns Bros. & Denton Limited, Midland Securities Corpn. Limited, Ross, Knowles & Co. Limited, Cochran, Murray & Co. Limited, Mills, Spence & Co. Limited, Bell, Gouinlock & Company Limited, Dawson, Hannaford Limited, Osler, Hammond & Nanton Limited, R. A. Daly & Company Limited, Wills, Bickle & Co., Bankers Bond Corporation Limited, J. H. Crang & Co., Oldfield, Kirby & Gardner Limited, Pemberton Securities Limited, Rene-T. Leclerc, Inc., The Western City Company Limited, Yorkshire Securities Limited, Collier, Norris & Quinlan Limited, Equitable Securities Canada Limited, Deacon Findley Coyne Limited, Eastern Securities Company Limited, Stanbury & Company Limited, F. J. Brennan & Company Limited, Okanagan Investments Limited and Walwyn, Fisher & Co.

Winnipeg and Central Gas Company — 4% first mortgage bonds series "A," to mature Aug. 1, 1960, $4,500,000. Dated Aug. 1, 1956. Sold privately to Deacon Findley Coyne Limited.

PREFERRED

Perme Gas & Oil Limited — 4½% convertible redeemable preference shares, (par value $2.00 per share), 4,000,000 shares. Sold at $2.00 per share by Greenshields & Co. Inc., Cochran, Murray & Co., Limited, Doherty Roadhouse & Company Limited, J. H. Crang & Co., T. A. Richardson & Co. and Wills, Bickle & Company.

Unlisted Mines, Oils

(By Broker Dealers' Assoc. of Ont.)

Approximate quotations, 3 p.m., Sept. 17, subject to confirmation and change. An asterisk (*) indicates an increase in price; a dagger (†) a decrease in price.

	Bid	Ask		Bid	Ask
Abenakis	2	3	Crack S	11	15
Abeta	9	11	Craibbe	14	16
Advance	13	15	Croydon	5	7
Alexander	4	6	Derlac	2	4
Ama Kir	5	7	Despina	†8	10
Anabar	5	10	Destrad	7	9
Anamaq	3½	5	Dom Ex	8	10
Anuwon	12	14	Dunvegn	14	16
Arctic	2½	3½	Durham	4	6
Atl Chib	23	26	East Ind	4	6
Bandwn	†30	40	Echo Ind	3	5
Beacon	8	11	El Bon	33	36
Belfast	7	10	Farcroft	4½	6
B Grass	6	8	Fleetwd	8	12
B McDad	6	8	Forty Fr	40	50
Bracemq	7	10	Gall Chib	33	36
Bramine	13	18	Gan Cop	7	9
Bright RL	2	3	Gateway	4	6
Bruce P	17	20	Glenbrk	10	12
Brunette	6	8	Glencona	5½	6½
Camlaren	4½	6	G Harper	11	14
Camp I	42	44	Goldmaq	5	7
Camray	2	4	Goldyke	2	3
Can Rad	7	12	Gov Gold	5	7
Canalask	15	16	Grd Chib	70	—
Canuba	87	90	Gui Por	11	13
Captain	7	9	HG Yng	20	23
Cn Mag	—	150	Hornfalt	12	15
Cn Alm	12	16	Hot Min	8	10
Capital	*90	95	Hucamp	11	14
Cayzor	425	450	Independ	12	14
Cn Lith	†55	60	Jardun	24	26
Cn Man	10	12	Jean Lk	25	28
Cnt Hill	†27	30	Jerome	5	7
Caral	30	36	Kamlac	12	14
Chellew	7	9	KB Mng	28	32
Chipman	*36	40	Kenda P	2	4
Clinger	5	8	Kenog	13	16
Clix	8	10	Laronge	22	25
Columbr	†5	7	Larum	12	15
Columbind	2	4	L Expan	10	12
Comstock	9	12	L Rnzy	*97	105
C Bi Ore	†38	43	Lowr Can	2	3
Con Cop	34	37	Lun Ec	53	58
Conecho	7	10	Lynwtn	28	33
C Harper	10	12	Magoma	10	15
C Vauze	6	8	Main Ok	†13	15
Cordell	12	16	Manecho	7	9

	Bid	Ask		Bid	Ask
Mall RL	7	9	Pickring	20	24
Mar Bird	13	15	Picton	20	25
Maree	3	5	Pine P	†1100	1200
Mate Yel	6	8	Pitchvein	8	10
McCuaig	2	4	Plum N	50	60
McFinly	*27	29	Polestar	40	45
Miles RL	2½	4	Presdor	2	4
Millkirk	14	18	Quejo	10	12
Mindust	130	145	Quest	1½	2½
Mt Keno	2	4	Raglan	30	40
M Fault	77	82	Rand M	5	7
Montgr	†254	260	Randona	1	3
Montco	15	20	Red Brk	6	9
Murmac	2	3½	Redcon	4	6
Nat Mal	11	13	Rhyolite	1½	2½
New Ang	†3	5	Richgrp	11	13
N Insco	8	11	Rio T C	†330	340
New Met	19	21	Rugged	2	4
N Redwood	7	9	Russet	5	6
New Wal	3	5	Salmita	3	5
Nickel I	7	9	Sheldon	10	12
Nickel O	40	60	St Mary	15	20
Nicoba	19	22	Snow L	8	10
Nipiron	20	23	S Dufalt	14	16
Norbeau	90	100	Starlight	9	12
Norcourt	2	4	Sunbear	2	4
Norford	1	3	Th'crest	27	30
Normar	3	6	Tower	†12	16
Novel Pr	2	3	U Ridge	20	25
Obsk '45	39	41	Valor	†23	25
Oceanic	200	215	Viking	12	14
Oklend	†7	9	Wadge	6	8
Ont Rim	7	10	Wesley	10	12
Orchan	*18	21	Westall	3	5
Orofino	10	12	West RL	2½	3½
Pacemakr	6	8	W Wasa	6	8
Patrd C	32	35	Y David	14	16
Pax new	70	90	**OILS**		
Payne	2	4	C Delhi	800	825
Pascalis	9	11	Cn Sup	*1775	1800
Peach	900	1100	N Ranch	9	10
Pelangio	2	4	O Smoky	6½	8
			Paig Pete	5	8

Bond Tenders

12 Noon, Sept. 20, 1956, Government of Canada Treasury Bills — Payable Dec. 21, 1956, $135,000,000. Dated Sept. 21, 1956.

12 Noon, Sept. 25, 1956, Municipality of the District of West Hants, Nova Scotia — 4½% and 5% 1-20-year debentures, $111,000. Dated Oct. 1, 1956.

Significant Investors' Index Numbers

No. of Securities	Mach. and equip. 10	Pulp and paper 9	Milling 2	Oils 5	Textiles and clothing 9	Food and allied prod. 14	Beverages 10	Bldg. mater. 15	Power and traction 8	Banks 7	Total utilities 13	Total co's 96
*1935 to date:												
High	947.5	1238.1	252.0	258.0	410.8	203.5	650.0	535.9	233.1	304.7	219.0	297.8
Low	69.7	51.6	61.2	78.4	78.4	79.5	79.3	66.7	60.2	60.0	62.5	61.1
1956 Monthly Figures:												
Jan.	735.6	1070.0	209.4	175.5	179.9	196.8	583.7	458.4	192.6	260.0	206.5	248.5
Feb.	728.0	1077.3	199.2	182.6	174.0	197.3	579.0	464.0	190.6	264.2	204.1	249.2
Mar.	804.6	1153.0	199.6	205.2	178.8	199.7	590.4	503.6	194.3	276.8	210.2	267.9
Apr.	826.4	1223.9	187.4	210.0	170.9	191.8	577.5	519.5	200.2	288.7	209.3	273.0
May	848.1	1192.5	179.8	211.7	160.2	180.8	551.7	488.5	201.0	271.7	204.2	268.5
June	843.6	1146.0	167.3	219.4	158.8	181.5	549.1	466.3	206.0	260.7	199.8	267.0
July	913.7	1185.8	173.9	234.9	159.5	190.8	565.4	504.5	222.4	287.4	207.9	282.4
1956 Weekly Figures:												
Aug. 2	947.5	1216.4	182.6	254.0	160.0	196.5	572.0	522.5	232.6	304.7	215.6	297.3
Aug. 9	936.7	1195.4	181.6	258.4	158.7	197.2	562.8	523.4	233.1	298.2	219.0	297.8
Aug. 16	917.0	1174.2	170.4	252.8	158.3	197.9	562.3	513.4	229.4	296.3	217.1	293.8
Aug. 23	898.8	1162.3	175.0	248.3	156.1	193.3	549.3	510.3	224.9	289.0	215.5	288.6
Aug. 30	877.0	1128.4	166.5	236.8	158.4	192.4	546.7	501.4	220.2	288.9	211.2	281.3
Sept. 6	896.0	1142.6	170.1	249.5	156.7	190.5	547.4	505.9	223.8	290.4	214.6	288.2
Sept. 13	863.8	1094.4	166.4	243.0	151.8	185.4	534.1	484.9	220.1	285.2	209.6	280.3

* High and low for year from 1935 to date inclusive are based on weekly figures used by the Dominion Bureau of Statistics.

Toronto Stock Exchange Index

	20 Indus.	20 Golds	15 B.M.	15 W.O.
Sept. 17	478.48	82.60	244.97	166.55
Sept. 14	478.17	82.50	244.06	165.49
Sept. 13	477.65	82.75	244.47	164.55
Sept. 12	479.71	82.87	246.40	165.60
Sept. 11	483.15	82.72	246.92	166.08
Month Ago	491.88	86.09	252.40	171.26
Year Ago	453.04	87.94	219.97	121.40
1956 High	506.33	90.35	261.51	184.09
1956 Low	430.46	82.39	218.46	118.09

Montreal Stock Exchange Index

	10 Util	20 Indus	30 Com	10 Pprs	15 Golds
Sept. 17	141.9	306.5	251.7	1514.83	79.97
Sept. 14	140.4	305.5	250.4	1513.68	79.16
Sept. 13	142.0	304.8	250.5	1519.48	79.74
Sept. 12	141.9	307.1	252.1	1521.68	80.18
Sept. 11	142.2	309.5	253.7	1542.01	79.67
Mon. Ago	147.0	312.4	263.3	1624.99	85.39
Year Ago	137.4	298.5	244.8	1482.04	79.91
1956 High	148.1	332.0	270.7	1712.34	89.73
1956 Low	133.7	283.5	233.7	1341.29	75.69

Dow-Jones Closing Stock Averages

	30 Indus	20 Rails	15 Util	65 Stocks
Sept. 17	498.76	159.27	68.15	175.28
Sept. 14	500.32	160.19	68.03	175.77
Sept. 13	499.69	156.75	68.15	174.84
Sept. 12	499.97	157.76	68.02	175.08
Sept. 11	502.16	158.34	68.48	175.90
Month Ago	511.24	164.01	70.11	180.08
Year Ago	483.80	163.17	65.51	172.46
1956 High	521.05	181.23	71.17	184.11
1956 Low	462.23	153.97	63.03	164.29

Government Bonds

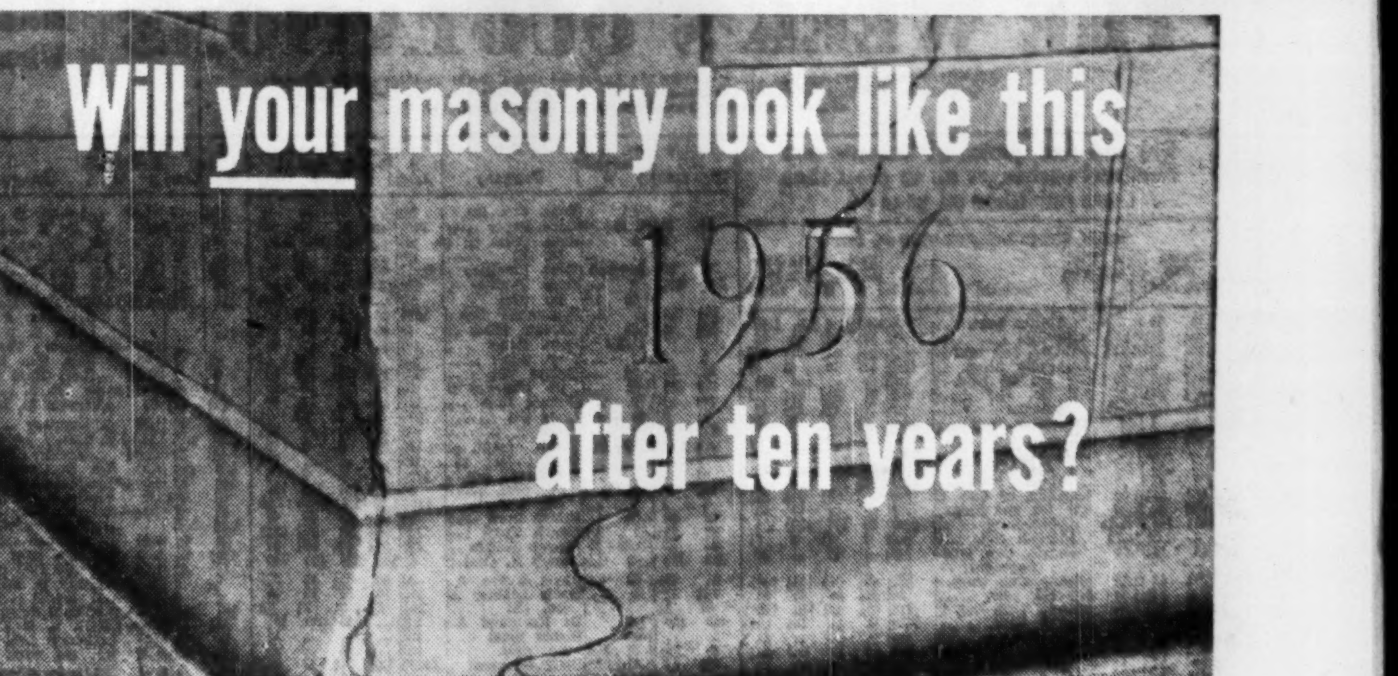
(Supplied by Investment Dealers' Assoc. of Canada)
Sept. 18, 1956

%	Due	Bid	Ask
Govt. of Can. Bonds:			
3	Jan. 1959	97½	98
3	June 1960	97½	97
3	Feb. 1962	95½	96
3	Oct. 1963	94½	95
3	Sept. 1966	93½	94
3	Perpetual	†86	87
2¾	June 1968	89½	90½
3¾	Jan. 1975/78.	98½	100½
3¾	June 1974/76.	92	93
Can. Nat. Railways:			
3	Jan. 1959	97	98
2¾	Jan. 1967	89½	90½
3	Jan. 1966	92½	93½
2¾	Sept. 1969	89	90
4½	July 1957	♦99½	100½
Grand Trunk Pacific Rly.:			
3	Jan. 1962	■95	97
4	Jan. 1962	■100	102
Int. Bank of Reconstruct. & Development			
3½	Apr. 1965	90	92
3½	June 1969	90	93
C'wealth of Australia:			
4	Nov. 1970	95	97

%	Due	Bid	Ask
Prov. Govt. Bonds			
Alberta:			
2¾	Mar. 1970	♦90	92
British Columbia:			
4½	Jan. 1969	♦98	100
3	Dec. 1960	95	96½
3	June 1964	91½	93½
5	Sept. 1959	♦101	103
B. C. Power Comm.:			
3	Oct. 1967	87½	89½
Manitoba:			
4	Dec. 1957	♦99	100½
5	Dec. 1959	■101	103
5½	July 1958	101	102½
3	Oct. 1965	89	91
4½	Dec. 1956	♦99½	100½
New Brunswick:			
4½	Apr. 1961	♦99	101
2¾	June 1966	84	86
3½	May 1957	98	99½
3½	Sept. 1965	92	94
Nova Scotia:			
4½	Nov. 1960	♦99	101
5	Mar. 1960	♦100	102
3½	June 1963/65.	90	92½
3	June 1966/58.	97	98½
2¾	June 1965/68.	85	86½

%	Due	Bid	Ask
Ontario:			
2¾	Nov. 1965/69.	84	86
4	June 1962	■98	100
4½	Jan. 1962	♦100	102½
2¾	July 1967/76.	83	85½
3	Nov. 1963/65.	90	92
5	May 1959	■101	102½
4	June 1969/72.	95½	97½
Ontario Hydro Comm.:			
4	Aug. 1957	■99	100½
2¾	Oct. 1965/68.	84	86
3	Dec. 1963/65.	90	92
3	Nov. 1967/69	85½	87½
3½	May 1974/79.	87	88½
Prince Edward Island:			
3	Oct. 1965	88	90
Quebec:			
4½	Aug. 1958	99	100½
4½	Jan. 1963	99	101
3	Sept. 1962/64.	91	93
Quebec Hydro Commission:			
3	Feb. 1969/73.	83½	86
3	Dec. 1958/60.	94	95½
3½	May 1971/74.	86	88
Saskatchewan:			
5	Aug. 1958	100	103
4½	Mar. 1960	♦99	101
5	Dec. 1959	♦101	103
3	Mar. 1963	90	92
3½	Nov. 1960/63.	92	94
3¾	Oct. 1962/65.	93	95
Newfoundland:			
4½	July 1965	97½	100

■Payable Can., N.Y. or £. ♦Payable Can. or N.Y. †Callable on or after Sept. 15, 1956.



PROTECT IT FROM MOISTURE NOW...

with durable G-E SILICONE *"defense in depth"*

Water cracked this concrete—by getting into the masonry pores, freezing and expanding. Keeping water out of masonry makes it last longer. A simple, inexpensive treatment of above-grade masonry, with water repellents containing General Electric DRI-FILM® silicones, retards cracking and spalling . . . preserves masonry beauty by checking unsightly efflorescent stains. Your masonry stays cleaner, too, for water can't carry dirt or stains into the pores. And, of course, a water-repelling *exterior* means a dry *interior*.

PROVIDES *"defense in depth"*

A water-repellent treatment with DRI-FILM silicones is the *most durable known* — because it provides "defense in depth."

Silicones actually *penetrate masonry pores* — get deep inside — where they cannot be eroded away. *Durable* silicone protection *lasts for years!*

Why not ask your formulator of water repellents about *silicone* protection for *your* masonry?

Chemical Materials Sales, 4575-556
1601 Davenport Road,
Toronto, Ontario.
Please send me further information on G-E Dri-Film 103.
☐ List of formulators.
☐ Technical data folder.
Name....................
Company....................
Address....................
City or Town.................... Prov....................

CHEMICAL MATERIALS SALES
CANADIAN GENERAL ELECTRIC COMPANY LIMITED

F-500 VAN

Dozens of Ford Truck models are actually priced *below all competitive makes!* But the price tag tells only *part* of the story, because Ford Trucks go on costing less as you drive them!

Ford Trucks give you the oil and gas economy of a modern *short-stroke* engine in *every* model, whether you choose a traditionally finer Ford V-8 or the road-proved Cost Cutter Six! Ford Trucks are built stronger, from top to tread, for *proved* longer life! Ford Trucks carry *more payload* per ton of vehicle weight! Ford Trucks get *more work* done per hour because they're easier to drive, offer unique comfort and safety features!

Finally, when you come to trade, you'll find you get *more* for your Ford Truck—further proof that *Ford Trucks cost less* all along the line!

F-100 PANEL

SEE YOUR FORD-MONARCH DEALER

F-100 PICKUP WITH 8-FT. BOX

Ford costs start low and stay low... they offer more and last longer!

THE WEEK'S QUOTATIONS

Montreal and Toronto Winnipeg, Calgary and Vancouver

Quotations here listed are the official, exchange prices for listed stocks including curb market quotations. For unlisted stocks, quotations by unlisted dealers are given. The Financial Post cannot accept any responsibility for these quotations.

Bid and Ask quotes of Toronto and Montreal exchanges up to press time are published on page 44

WEEK ENDING SEPTEMBER 14, 1956

Range 1956 High	Low	Div. Y'ld R'teSep.14 $	%	Company	Sales	Last Sep. 7	Week end. Sep. 14 H	L	Close
1.75	.70			Abitibi Lum.	47800	1.45	1.45	1.30	1.40
43¼	34½	*1.56		Abitibi	17535	37½	37½	35	36
26½	23½	1.12½	4.6	Do. 4½% pref.	1473	24¼	24¼	23½	23½
9¾	9¼	.50	5.4	Acadia Atlan.	1560	9¾	10	9¼	9¼
105½	100	5.00	5.0	Do. 5% pref.	nil	..	..	100	100
24¼	20½	1.20	5.7	Do. (A)	825	21	21½	20½	21¼
..	..	▪1.00	..	Admiral	nil	..	17½	12¾	17
8¼	7	.40	5.6	Agnew Surp.	300	7¼	7¼	7¼	7¼
10¼	8¼	.56	6.5	Do. pref.	15	9	8¼	8¼	8¼
2.10	1.55	..	..	Albt. Dist.	2600	1.75	1.75	1.60	1.60
1.75	1.40			Do. V.T.	1200	1.50	1.50	1.40	1.40
127	92		..	Algoma Steel	3313	118½	119	114	114
26½	21¼	1.00	4.7	Alum. of Can. p	305	23¼	23½	21½	21¾
52¼	48	2.25	4.7	Do. 2nd pref.	2830	49	49	48	48
147½	100	▪1.75	..	Aluminium	9386	136	136	130½	134
8	5¼	▪.15	..	Andian Nat.	200	6	6¼	6	6¼
15	13¾	▪.40	..	Anglo. Can. Oils	nil	..	17	..	15
				(Brandon)					
51¼	43	3.00	4.8	Ang. Cdn. Pulp	260	43	51¼	†41¼	†41¼
54¼	51½	2.80	5.3	Do. pref.	60	51½	53	52	53
50¼	43½	2.25	5.3	Ang. Can. Tel. p	115	42¼	42¾	†42	†42
13½	10¼	.60	5.4	Ang. Nfld.	3375	11	11	10¼	10¾
..	..	▪1.00	..	Anglo-Scand. Inv	nil	..	..	..	11
28¼	24½	1.20	4.7	Anthes Imp.	275	26	26	25½	25½
80	35	..	..	Arcan Corp.	1000	42	52	40	40
28¼	19¼	.80	4.1	Argus	5660	20	20¼	19¼	19¾
57	53	2.40	4.5	Do. 4½% pref.	2126	55½	54¾	53½	53½
47½	41	2.50	6.0	Do. 82.50 pref.	786	45	43	41	42
35	35	▪.75	..	Aro Equip.	nil	..	..	..	..
45	38	1.00+2.60		Asbestos	1728	40	40¾	39½	39½
14	13¼	.60	4.6	Ashdown Hd. A.	225	13¼	13¼	†12½	13
24½	12½	.72	5.5	Do. (B)	nil	..	12½	13	13
6¼	3¼	..	..	Ash Temple	100	4	3¼	3¼	3¼
100	96	6.00	6.0	Do. A pref.	nil	..	97	..	100
10	9½	.65	6.8	Do. B pref.	nil	..	9¾	10½	9¾
..	..	▪4.00+*2.00		Assoc. T&TA p	nil	..	..	..	..
7	5¾	..	..	Atlan. Accept.	1000	6	6	6	6
18	15	1.10	..	Do. pref.	nil	..	15½	18	18
34½	17¾	.50	..	Atlas Steels	6755	30½	30½	29	30½
15	10¼	*.52+1.50		Auto Electric	100	14¼	14	14	14
10½	9½	.50	5.0	Do. (A)	nil	..	10	..	10
6¼	5	▪	..	Auto Fabric A	2500	6	5¼	5¼	5¼
3.50	1.00	▪	..	Do. (B)	nil	..	11	2	2¼
47	39	1.20+2.20		Bk. Can. Nat.	585	44½	44½	44	44
62	47½	1.40+2.20		Bk. Montreal	2565	56	55¾	54	54¾
58½	53½	1.80+*.20		Bk. N. Scotia	2058	58½	59¼	58½	58½
3¾	..	..	..	Do. Rights	nil	..	..	..	4.40
..	..	3.20+*.80		Barber-Ellis	nil	..	42	..	..
..	..	3.50	..	Do. 7% pref.	nil	..	..	..	..
7¾	7	..	..	Barcelona	nil	..	..	9	7
10	9¼	1.00	11.0	Bates & Innes A	nil	..	9¼	9¼	9¼
68½	62	3.00+*.50		Bathurst Pr. A	370	64	63½	62	63¼
35	37	*1.25	..	Do. (B)	280	45	44¾	43	43
8	6¼	.40+*.10		Beatty Bros.	635	7	7¼	7	7
32¼	32¼	*1.00	..	Beaubran	nil	..	30¼	31½	32¼
21	19	*.80	..	Beaver Lumber	200	19½	19½	19½	19½
22¼	20¾	1.50	7.5	Do. (A)	5	21¼	20	20	20
33	32¼	1.40	4.2	Do. pref.	nil	..	..	33	33
9¼	6¼	1.20▪	..	Belding Cort.	nil	..	7	9	7
13	11¼	.70	5.8	Do. pref.	nil	..	10	..	12
10	5¾	▪	..	Belgium Stores	230	9	9¼	9¼	9¼
16	11	1.00	6.3	Do. pref.	50	16	16	16	16
51¼	45¼	2.00	4.3	Bell Telephone	16480	47¾	48	46¾	46¾
8	5	.40	5.7	Biltmore Hats	nil	..	6¼	7¼	7
14½	12¾	1.00	7.8	Do. (A)	50	13	13	13	13
50	50	2.40+2.40		Bird Constr.	nil	..	50	..	50
10	8	..	..	Blue Ribbon	nil	..	11	15	9
36	27	▪.62½	..	Do. pref.	nil	..	36	40	36
..	..	▪.50	..	Bowes Ltd.	nil	..	20	..	13
41	46½	..	..	Bowater Corp.	310	48½	48¾	46	46½
20	17½	1.00	5.6	Brant. Cord. A	nil	..	17½	18	18
12¼	9½	.50	4.7	Do. (B)	nil	..	10	10¾	10¾
8	6¾	*.50+▪		Brazilian Tr.	9254	7¼	7¼	6¾	6¾
98	90	6.00	6.8	Do. pref.	5	98	†88	†88	†88
96	2.65	2.90	6.2	Bridge & Tank p	25	46½	46½	46½	46¾
3.40	2.65	..	..	Do. Warr.	nil	..	2.50	..	3.10
19	15	..	..	Bright, T. G.	nil	..	14	15¾	15
21½	19	1.15	5.8	Do. 5% pref.	5	19½	20	20	20
39¾	29	1.20+1.40		Br. Am. Bk. N'ts	155	35¼	35	35	35
50¼	35	1.00	2.2	Brit. Amer. Oil	22461	46	46¾	45	45¾
95¼	86	4.00	4.8	B.C. Elec. 4% pf.	60	87¼	86	†83¾	83½
106	97¼	4.75	4.9	Do. 4½% pref.	440	†96	98	†97¼	97½
55½	50	2.50	5.0	Do. 5% pref.	430	50½	50½	50	50½
50¼	46½	2.25	5.2	Do. 5% pref.	90	47	47	†44	†44
51	44½	2.12½	4.60	Do. 4½% pref.	95	44½	46½	44½	46½
20	15½	*.37½	..	B.C. Forest	8495	16¼	16¾	15¾	15¾
17¾	15	.75	4.7	B.C. Packers A	209	15½	16¼	15	15¾
16½	12	*1.25	..	Do. (B)	200	14	14	14	14
50¼	36½	1.40	..	B.C. Power	6997	46½	47	46	46½
52¼	45½	2.00	4.0	B.C. Tele.	1797	49½	50	47¼	49½
1.05	.87½	..	..	Carling Br. Alta.	nil	..	..	..	.98
2.25	1.71	4.00	..	Brown Co.	3000	19½	19¾	18¼	18¾
14½	8½	1.20½	..	Bruck S. Mills A	350	9¼	8¼	8½	8½
5	3½	▪	..	Do. (B)	nil	..	3	3¼	3½
40	23¼	1.80	5.1	Building Prod.	737	37	37	35¼	35¼
7¾	5¼	..	..	Bullock's A	nil	..	..	5¼	7¼
33	27½	1.00+.50	..	Burlington Steel	560	30	30	29	30
14½	11	*.60+.05	..	Burns & Co.	952	13	13	12½	12¾
9¼	8	.45	5.6	Burrard D.D. A	120	8	8¼	8	8
3.30	3.00	▪	..	Butterfly Hos.	nil	..	1.50	2.50	3.10
..	..	.80	6.2	Caldwell Linen	nil	..	..	..	..
24½	21¼	1.50	7.0	Do. 1st pref.	nil	..	21¼	24½	21¼
19¼	12	.80	7.7	Do. 2nd pref.	nil	..	12	13	12
69	53	*1.00	..	Calgary Pwr.	3141	67¼	67½	65	67
105	101¼	5.00	4.9	Do. 5% pref.	55	103	103	103	103
3¼	3	.10	3.3	Canada Bread	400	3	3	3	3
60	50	2.50	5.0	Do. pref. B	nil	..	45	50	50
37	28¼	1.00	3.1	Canada Cement	6644	32¾	33¼	31¼	32
32	28¼	1.30	4.5	Do. pref.	958	29	29¼	29	29
7¼	7¼	.20	..	Can. Cr. Stone	100	7¼	7¼	7¼	7¼
21¼	20¾	*.90	..	C. & D. Sugar	200	23¼	24¼	22¾	23
19	17¾	*1.00	..	Can. Floor B	nil	..	..	18	17¾
14	13	.40	3.0	Can. Foils	100	13	13¼	13	13¼
17	14½	.60+*▪▪.11		Do. (A)	nil	..	14¼	15¼	15¾
15	15	..	..	Can. Forg.	nil	..	..	15	▪16
28¼	25¼	1.50	5.4	Do. (A)	nil	..	28	30	28
36	30½	*1.50	4.2	Can. Iron	2020	36	36¼	36	36
106¼	101¼	4.25	..	Can. Life Assur.	nil	..	101¼	106	101¼
168	155	*4.15	..	Can. Life	25	165	156	156	156
15	10	1.25	..	Can. Machine	nil	..	10	10¼	10
62	53	2.00+▪	..	Can. Malting▪	370	58½	58¾	58½	58¾
26	22½	1.17	5.0	Do. 4½% pref.	1632	24	24	23½	23¾
43	37	1.50	3.7	Can. Packers A.	300	40¼	42	40	40½
29¼	33½	1.50	4.0	Do. (B)	300	36	36	36	37½
96	86	3.00+*.40		Can. Perman.	345	90	91	89½	89¾
104	97	4.40	4.5	Can. Safeway p	nil	..	..	97	97
36	25	*1.00	..	Can. Steamships	278	32	30	28	28½
14	12	.62½	5.1	Do. pref.	125	12¼	12¼	12¼	12¼
20	18	.80+1.35		Can. Vinegars	22	17	18¼	18¼	18¼
..	..	.50	6.2	Can. W. Cord A	nil	..	..	..	8¼
225	158	4.00	2.6	Can. W. Cable A	nil	..	205	..	155
24½	18	*.40	..	Do. (B)	725	21½	20	19	19
95	85	1.00+▪	..	Canadian Arena	nil	..	96	..	95
7¾	5	▪	..	Cdn. Bakeries	nil	..	6	6¼	5¼
89	44½	1.40+*.20		Cdn. Bk. Com.	1864	53¼	54	53	53
33½	27	1.50	5.5	Cdn. Breweries	4940	27¼	27½	27	27¼
33¼	27½	1.35	4.5	Do. pref.	855	29¾	29¾	27¼	27¾
33	27	1.50+1.50		Cdn. Bronze	600	31	31¼	30½	31¼
105	102	5.00	4.8	Do. pref.	20	102	102	102	102
42¼	32½	2.00	4.9	Cdn. Canners	2590	41½	41½	40½	40¾
21¼	13¾	.60+2.15		Cdn. Celanese	1888	14¾	14¾	12¾	14
37	29	1.75	6.0	Do. pref. $1.75	395	29¼	29¼	28	29
21¼	17¾	1.00	5.6	Do. $1 pref.	nil	..	..	20	20
11¼	8½	▪	..	Cdn. Chem.	4395	9¼	9¼	8¾	9¼
14¾	8	▪	..	Cdn. Collieries	4255	8½	8½	8	8¼
.96	.85	*▪▪.02½	..	Do. pref.	22580	.90	.93	.90	.90
4¼	4	..	..	Cdn. Convert A	nil	..	4¼	..	4¼
4	4	..	..	Do. (B)	nil	..	4	..	4
15	8	▪	..	Cdn. Cottons	nil	..	7	19	17
9	7	..	..	Do. Pref.	100	7½	7¼	7¼	7¼
25½	19	*.50	..	Cdn. Dredge	1886	20¼	21	20½	20¼
29¼	22	1.20	4.4	Cdn. Fairb.	nil	..	..	27	27¼
125¼	124	6.00	4.8	Do. pref.	nil	..	125	..	125
4¼	3	▪	..	Cdn. Food Prod.	40	3¼	3¼	3¼	3¼
8¼	8	..	..	Do. A	500	8	8	8	8
55	53	..	..	Do. pref.	110	50½	51	50	52
1000	825	*7.00+4.00		Cdn. Gen. Elec.	nil	..	80	1000	1000
32	28¼	1.10+*.18		Cdn. G. Inv.	1625	30¼	30¼	30	30¼
27	23	*.75+▪	..	Cdn. G. Sec. A	80	23¼	23¼	†22½	22½
26	25	*.75+▪	..	Do. B	nil	..	25	29	†26
13¼	7¼	*▪▪.11¼	..	Cd. Hydro-Card.	3216	10¼	10¼	9¼	9¾
6	5	1.10	..	Cdn. Ice Machine	nil	..	5	6	5
12¼	11	.80	7.3	Do. (A)	150	11	11	11	11
24	18	*.50	..	Cdn. Indust.	1408	19¼	19¼	†17½	19½
95	90	*2.00+2.00		Do. pref.	10	90	90	90	90
50	40	*.60	..	Cdn. Ingersoll R	365	43¼	50	45¼	50
20	17½	*.75	..	Cdn. Int. I. Tr.	nil	..	19¼	..	19¼
98	93	5.00	5.4	Do. pref.	nil	..	..	..	.93
41	21	*1.50	..	Cdn. Locomo.	15	29½	29	28¼	28¾
6.62½	4.00	*.06	..	Cdn. Marconi	2035	4.50	4.60	4.30	4.60
29	19½	.60	2.2	Can. Oil	4335	27¼	28	27	27¼
107½	100	5.00	4.8	Do. 5% pref.	nil	..	..	104	104
165	160	8.00	5.0	Do. 8% pref.	nil	..	160	165	160
99	93	4.00	4.3	Do. 4% pref.	nil	..	..	93	94
13¾	7¼	..	..	Do. Warr. 1963	900	12	12	11¾	12
7.37½	3.25	..	..	Do. Warr. 1953	900	6	6	5¾	5¾
36¼	30½	1.50	4.4	Cdn. Pacific	16426	33¾	34½	33	33¾
21¼	22¼	..	..	Cdn. Petrofina p	2623	29¼	29¼	28¼	28¾
9	5¾	..	..	Cdn. P. & P. Sec	nil	..	7¼	8	8
1.20	.85	..	..	Cdn. Propane	nil	..	..	1.10	1.10
21¼	15	..	..	Cdn. Salt	100	21	21	21	21
4¼	4	▪	..	Cdn. Silk A	50	4	4	4	4
136	91	.60+*.10		Cdn. Tire	65	136	135	130	130
..	..	1.00	4.8	Do. pref.	nil	..	20¼	..	21
105	98½	5.00	5.1	Cdn. Utilities p.	5	†97	198	†98	†98
..	..	4.25	..	Do. 4½% pref.	nil	..	..	86	..
46	20¼	1.50	5.0	Cdn. Vickers	1310	32¼	32¾	30¼	30¼
13¾	10¼	.40	..	C. Wallpaper A	nil	..	14	16¼	†14
17	9	*.40	..	Do. (B)	nil	..	14	16¼	16
30	14¼	..	..	Cdn. Lumber	nil	..	..	27¼	27
19	16¼	.80	4.9	Cdn. West Gas p	190	17¼	16¼	16¼	16¼
53	42	*1.00	..	C. Westinghouse	378	42¼	43¼	42	42¼
6.25	4.60	*▪.15	..	Capital Estates	215	5.00	5.00	4.90	4.90
1.50	.95	..	..	Carling Br. Alta.	nil	..	1.30	1.10	1.25
1.20	1.00	..	..	Do. V.T.	nil	..	1.10	1.00	1.00
14	12¼	.60+*.30		Carter, J. B. A	nil	..	12¼	13	12¼
18	17	*1.00	..	Do. (B)	nil	..	18	..	†19
28	25	.50+*.15		Catelli Food A	60	25	25	25	25
40	38	1.00+*.15		Do. (B)	60	39	39¼	39¼	39¼
..	..	*.37½	..	Celanese Corp.	nil	..	..	..	..
..	..	▪4.50	..	Do. 4½% pref.	nil	..	..	..	..
..	..	▪7.00	..	Do. 7% 2nd pf.	nil	..	..	..	..
38¼	27¾	.80	2.8	Cent. Can. Invest	nil	..	..	30	28¼
103	100½	5.00	5.0	Do. pref.	nil	..	100¼	..	100¼
72¾	54	1.40	2.5	Chart. Trust	63	56½	56½	56	56
12.50	3.30	..	..	Chateo Steel	7270	11¼	12½	10¾	12½
6¼	5	.50	7.7	Do. pref.	20	6¼	6¼	6¼	6¼
18¼	14	1.00	6.8	Chateau-Gai	323	15	15	14¾	14¾
86	59	*2.25+11.00		Chrysler Corp.	3450	68¾	68	67¼	68
.65	.50	*6d	..	Cinzano A	nil	..	..	..	.50
1¼	1¼	5¼%	..	Do. 5% pref.	nil	..	.83	..	1.50
2¼	2	▪	..	Circle Bar Knit.	nil	..	2	3	2
42	42	..	..	Do. (A)	nil	..	42	42	42
6¼	3¼	..	..	Claude Neon A	nil	..	5¼	8	6
7.00	3.65	..	..	Do. (B)	nil	..	6¼	8	6
82	68	..	..	Do. pref.	nil	..	72	76	80
22¼	18	..	..	Cochrane-D	100	18	18	18	18
22	18¼	.80	4.3	Do. (A)	nil	..	16¼	17¼	†18¾
8¼	5¾	▪	..	Cockshutt Farm	1772	7	6¾	6¾	6¾
17¾	16	1.00	6.3	Coghlin, B. J.	nil	..	16	16¼	16
13¼	13¼	*.75+.35		Coll. Terminal	nil	..	12	..	13¼
13¾	13	*.75+.35		Do. pref.	nil	..	12	..	13
13	9¾	*.40	3.5	Comb. Enter	325	11¼	11¼	10	10
12¼	10¼	.80	7.6	Conduits Nat.	10	11	10¼	10¼	10¼
170	139	1.50	1.0	Conf. Life	nil	..	105	150	153
10¼	6¾	*.50	..	Cons. Bakeries	110	7¼	7¼	6¾	6¾
1.90	1.20	..	..	Cons Div Sec A	17	1.65	1.60	1.80	1.80
..	33	*1.00	..	Do. pref.	7	36¼	†37	†37	†37

Range 1956 High	Low	Div. Y'ld R'teSep.14 $	%	Company	Sales	Last Sep. 7	Week end. Sep. 14 H	L	Close
		*.25		Cons. Fire Ins.	nil	..	7	10	4
47¼	33½	*1.30+.40		Cons. Paper	9457	40	41	36¼	38½
3	2¼	▪	..	Cons. Press A	nil	..	2.30	2.50	2.30
1¼	1	..	..	Do (B)	nil	..	1	1¼	1
36	30	.80+*.95		Cons. Smelters	18111	30¼	31¼	30¼	30¼
6.75	2.90	▪	..	Cons. Textiles	500	4.25	4.00	3.90	3.90
..	..	1.00	4.9	Do. pref.	nil	..	..	..	†20¼
26¼	20	.80	3.1	Consumers Gas	4823	25	26¼	24¼	26
33¼	30	1.50	4.9	Consum. Glass	45	30	31	30	30¼
..	..	*▪1.35▪	..	Cont. Can▪	nil	..	..	..	35
..	..	..	..	Copp Clark	nil	..	42	42	42
5	4¼	..	..	Corbys Vot	896	16¼	16¼	15½	16
18	15¼	*.50	..	Do. Non-Vot B	35	15¼	15	15	15
17¼	15	*.50	..	Cosmos Imp.	100	12¼	13	13	13
13¼	11¼	.70	5.4	Craig Bit	975	9¼	7¼	6¼	7¼
7¼	5¼	.30	4.1	Craig, R. L.	nil	..	20	..	22¼
12¼	9	*.50+.05		Credit Accept.	115	†9¼	9	9	9
..	..	..	..	Cres Cream. pf.	nil	..	..	..	6¾
..	..	..	..	Crestbrook Ltd.	1700	5	5	5	5
51¼	5	..	..	Do. pref.	35	†49	†49	†49	†49
49¼	49¼	2.75	..	Do. Warr.	1430	1.00	†1.21	†1.15	†1.15
1	1	..	..	Crown Cork	95	52	48	48	48
56	46	2.00	4.2	Crown Trust	nil	..	23¾	24½	†22½
28	22½	.60	2.7	Crown Zellers	475	57¼	57¼	56½	57
69	53	▪1.80+▪		Crow's N. Coal	40	205	220	205	220
51	49¼	3.00	6.0	David & Fre. A	50	50	50¼	50	50¼
12¾	10	▪	..	Davis Leather A	110	10	10	10	10
4¼	3¼	..	..	Do. (B)	125	3¼	3¼	3¼	3¼
150	150	*1.00	..	De Havilland A	nil	..	145	198	150
..	..	▪.50	..	Disher Steel	nil	..	..	..	19
25	25	1.50	6.0	Do. pref.	nil	..	24	..	25
39½	33	1.20+2.50		Distill-Seagram	14637	34¼	34¾	33	33¼
..	..	*10.00+6.00		Dom. Ang. Inv.	nil	..	104	104	104
..	..	5.00	5.3	Do. pref.	nil	..	..	24	24
24½	19½	.40+*.30		Dom. Bridge	3640	21¾	21¾	21	21¾
10¼	8	..	..	Dom. Coal, pf.	100	9¼	10	10	10
14	11	*.85	5.7	Dom. Corset	210	14	14¼	14	14
7	7	*.30	..	Dom. Electro	18111	30¼	31¼	30¼	30¼
26½	22	*.50+.20		Dom. Engineer	2350	24	24	23	23
11	11	.40	4.0	Dom. Fabrics	nil	..	10¼	10½	10
24	22½	1.50	6.3	Do. 2nd pref.	nil	..	..	24	24
35½	27½	.80	2.5	Dom. Foundry	4348	32¼	33¼	30¼	31¼
103½	99	4.50	4.5	Do. 4½% pref.	130	100	99	99	99
39¾	36	▪	..	Gen. Motors	395	40	44¾	44	48
3	3	1.40+2.80		Dom. Glass	275	15	15¼	15¼	15¼
48	40	▪	..	Do. (B)▪	nil	..	42	..	40
19¾	8½	.40	4.7	Gen. St. Wares	190	8½	8½	..	8½
61	90	93	90	Do. pref.	6	51	..	..	54
99	90	5.00	5.6	Do. pref.	50	23¼	..	..	..
170	132	4.00	3.7	Dom. Magnes.	675	174	18	17	17
140	34¼	34¼	34	Dom. Oilcloth	140	34¼	34¼	34	34¼
nil	..	30	30¼	Dom. Sect. Inv.	nil	..	30	30¼	29
51	48	2.50	5.1	Do. pref.	nil	..	47	49	49
110	100	*2.00	▪	Dom. Square	nil	..	..	..	110
2058	58¾	3.00	5.1	Dom. St. & C.	12259	22	22¼	21¼	22
411	41¼	2.50	6.0	Dom. Stores	11215	41¼	41¼	39	39¼
17169	15¾	1.50	9.4	Dom. Tar & Ch.	1125	15¼	15¾	14	14¼
125	21¾	1.20	4.6	Do. pref.	6087	21¾	21¾	21¾	21¾
..	..	..	..	Dom. Textile	nil	..	137	142	140
100	14	1.00	7.1	Dom. Woollens	50	14	14	14	14
1.60	1.20	1.30	1.20	Donnell & Mu.	1300	1.20	1.30	1.20	1.30
390	33¼	33¼	32	Donohue Bros.	1151	33	33	32	32
310	250	3.00	4.0	Dow Brew.	1225	231	24	221	231
29¼	22½	*.40	..	Du Pont of Can.	nil	..	..	92	90
93	90	3.75	4.2	Do. pref.	50	91	91	84	84
9	8¼	.55	6.5	Dupuis Fre A	5	7	6¼	6¼	6¼
7.00	3.40	..	..	East Koot. Pr.	nil	..	80	..	80
80	70	..	..	Do. pref.	..	..	..	..	..
..	..	4.00+*1.50		East. Bak. 4% p	50	5¼	..	5	5
4	4	..	..	East Steel	100	14¼	15	15	15
19	14½	.20+*.40		Easy Washing	nil	..	16	18	18½
19½	18¼	1.00	5.4	Do. 5% pref.	40	40	38	38	..
40	35	1.00+1.50		Economic In

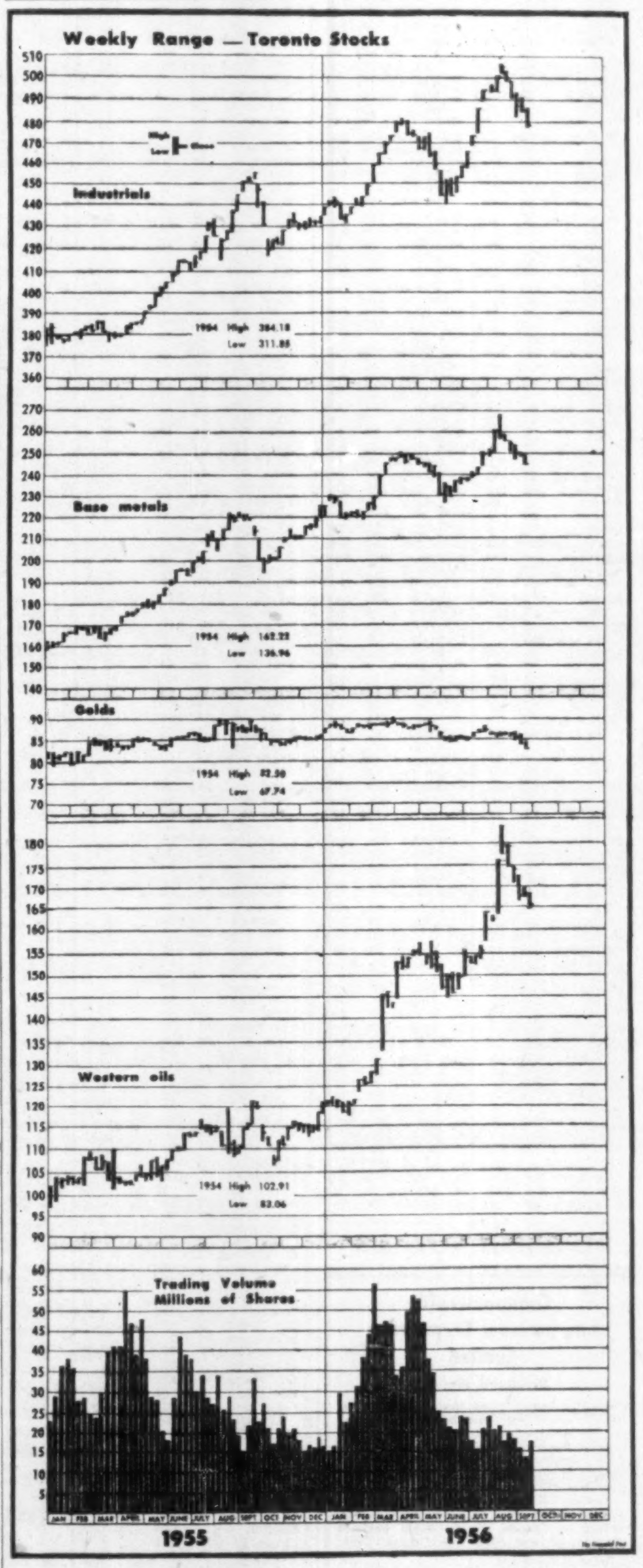
Range 1956 High	Low	Div. Rate $	Company	♦ Sales	Last Sept. 7	Week Ending September 14 High	Low	Close
1.10	.40	...	Con. Que. Y.	29,150	1.00	1.00	.95	1.00
.60	.25	...	C. Red Pop.	7,515	.29	.28	.25	.28
1.39	.45	...	C. Regcourt	786,645	1.20	1.32	1.16	1.17
.25	.13	...	Con. San'rm	6,000	.16	.16	.15	.15
38.00	30.00	.80 +*.55	Con. Smelt.	18,111	30.50	31.12½	30.50	30.62½
5.40	3.45	...	Con. Sud'ry	65,365	4.30	4.45	4.20	4.35
.60	.31	...	Cons. Thor	2,725	.32	.32	.31	.31
.90	.45	...	Cons. Tung.	12,090	.50	.50	.45	.49
2.25	1.00	...	Con. Potash	1,660	1.00	1.50	1.10	1.25
8.00	5.75	...	Conwest	500	6.60	6.50	6.50	6.40
6.65	3.25	...	Copper Cliff	21,285	4.20	4.25	4.00	4.05
2.00	1.42	...	Copper Corp.	13,200	1.65	1.70	1.50	1.60
.71	.39	...	Coppercrest	12,360	.53	.65	.54	.62
.56	.15½	...	Copper Man.	12,054	.19	.19	.18	.18
.18½	.05	...	Cortez	323,100	.14	.18½	.14½	.17
2.18	1.11	...	Coulee	17,800	1.15	1.24	1.11	1.20
.29	.16	...	Cournor	1,500	.18	.16	.16	.16
3.10	1.31	...	Cowichan	10,000	1.45	1.58	1.45	1.55
.16	.08	...	Crestaurum	1,000	.09½	.11½	.11½	.11½
.37	.19	...	Croinor	73,400	.23	.34	.22	.33
.10	.05	...	Cron. Bab.	3,000	.07	.08	.08	.08
.73	.28	...	Crowpat	18,005	.33½	.35	.28	.31
.39	.15	...	Cusco	118,612	.15	.27	.15	.24
.00¾	.00½	...	Cryderman	nil	....	.01	.03½	.00¾
1.26	.30	...	D'Aragon	58,900	.75	.75	.69	.70
1.00	.40	...	Decoursey B.	18,837	.55	.52	.45	.46
.47	.15	...	Do. warr.	3,500	.16	.17	.15½	.15½
.85	.45	...	Deer Horn	nil	....	.41	.45	.45
.32½	.17	...	D'Eldona	11,833	.20	.21	.18½	.21
.88	.70	.04	Delnite	1,500	.70	.75	.73	.73
1.00	.24½	...	Desmond	13,050	.24½	.26	.24½	.22
.20	.12½	...	Detta Min.	30,300	.14	.15	.13½	.14
.93	.25	...	Diadem	25,914	.29	.29	.25	.25
.30	.07	...	Dickstone C.	nil	....	.17	.19	.20
15.87½	13.75	.70	Dome M.	1,610	13.87½	13.87½	13.75	13.50
.25	.15	...	Dom. Asb.	3,600	.16	.17	.16	.16
.70	.42	...	Donalda	62,945	.47	.52	.46	.48
.09	.04	...	Doreen	1,000	.05	.05	.05	.05
2.05	.60	...	Duvan	83,400	.78	.76	.60	.68
.47	.18	...	Duvex	223,900	.31	.32½	.30	.30
1.60	1.00	...	Dyno	17,000	1.07	1.10	1.07	1.07
.13½	.09½	...	East Amph.	5,500	.09½	.09½	.09½	.09½
2.52	1.56	*.05	East Mal.	7,500	1.60	1.65	1.56	1.60
6.75	5.60	*.30 +.05	East Sull.	6,965	5.75	5.80	5.60	5.60
1.50	.70	...	East. Asb.	7,600	.81	.81	.75	.78
1.08	.56	...	East Metals	28,200	.63	.61	.56	.58
7.70	5.60	...	East Min.	28,754	6.15	6.15	6.00	6.05
.79	.43	...	Elder	5,000	.52	.52	.45	.43
1.80	.62	...	Eldrich	11,400	.80	.83	.62	.62
1.20	.09	...	El-Pen-Rey	201,548	.53	.58	.50	.54
.35½	.09½	...	El. Sol.	571,430	.26½	.35½	.25	.30
.31	.15	...	Emerald	2,500	.17	.17½	.17½	.17½
2.35	1.08	...	Eureka	66,400	1.30	1.33	1.25	1.34
1.30	.85	...	Expl. All.	106,870	1.21	1.19	1.10	1.12
.50	.22	...	Fab. Met.	31,000	.22	.23	.23	.23
44.00	29.00	*.50 +.10	Falconbridge	6,170	40.00	40.87½	39.50	39.62½
.49	.21	...	Fano	1,566	.30	.29	.22½	.29
2.37	1.25	...	Faraday	12,195	1.41	1.45	1.30	1.31
.70	.50	...	Do. warr.	100	.65	.65	.65	.65
.72	.20	...	Farw't Tung.	12,550	.30	.34	.29	.34
.62	.20	...	Federal	14,500	.45	.42	.38	.38
.01½	.01½	...	Flin Flon	nil	....	.00¾	.01	.01
.28	.12	...	Fontana 45	9,500	.15	.15	.13	.13
.70	.34	...	Forty-Four	500	.45	.40	.40	.40
.26	.07½	...	Francoeur	156,750	.19	.24	.18	.23
4.75	3.80	...	Frobisher	27,645	4.10	4.10	3.95	4.05
97.00	82.00	...	Do.4% deb.	100	82.50	84.00	82.00	82.00
.24	.20	...	Fundy Bay	18,000	.21	.21	.20	.20
.54	.27	...	Gaitwin	22,500	.31	.35	.31	.32
56.00	34.00	...	Gaspe Cop.	535	50.50	50.62½	48.00	48.00
24.00	17.00	...	Geco	3,962	20.00	19.75	18.50	18.50
.64	.32	...	Genex	700	.39	.35	.35	.35
3.90	1.50	...	Geo-Scient.	6,050	1.76	2.00	1.76	1.76
1.05	.65	.06	Giant. Mas.	4,300	.75	.70	.65	.68
6.30	4.50	*.30	Giant Y'fe.	4,135	5.80	5.70	5.50	5.50
1.60	.70	...	Glenn Ur.	69,877	1.00	1.05	.90	.97
.46	.23	...	Goldale	16,000	†.25	.26½	.23	.23
.36	.16	...	Gold Crest	32,600	.18	.19	.16	.16
.13¾	.09	...	Gold Eagle	nil	....	.09½	.10	.09½
.01¾	.00½	...	Gold Lake	nil	....	.01½	.01½	.01¾
3.00	2.55	...	Gold Man.	5,900	2.70	2.70	2.55	2.57
.60	.26	...	Goldfields	6,100	†.25	.28½	.26	.27
.45	.20	...	Graham R.	10,300	.21	.22	.21	.21
19.75	12.62½	*▲.25	Granby	nil	....	12.00	13.75	12.62½
.65	.28½	...	Grandines	80,960	.28½	.36	.30	.32
.75	.42	*.02	Grandoro	3,000	.74	.75	.66	.74
9.45	5.50	...	Granduc	3,350	6.00	6.00	5.50	5.70
.22	.14	...	Grandview	nil	....	.13	.15	.15
.03½	.02	...	Great Falls	nil	....	.03	.05	.03
1.09	.42	...	Greyhawk	24,500	.50	.49	.46	.47
.21	.10	...	Gui-Por Ur.	20,500	.10	.11	.10½	.11
1.49	.31	...	Gulch	23,300	.37	.39	.32	.37
.26	.14	...	Gulf Lead	23,500	.15½	.15	.14	.14
20.50	15.25	...	Gunnar G.	12,265	19.25	19.87½	18.75	19.00
12.75	8.50	...	Do. warr.	10,366	10.12½	10.37½	9.50	9.60
.29	.12	...	Gwillim L.	95,600	.16½	.17	.15	.16
.39	.26	...	Haitian	148,025	.30	.31	.27	.29
3.50	3.25	.20	Hallnor	nil	....	3.25	3.50	3.25
.09	.04	...	Hamil.	3,500	.04	.04½	.04	.04
.22	.12½	...	Hard Rock	16,600	.14	.15	.13	.15
1.70	.30	...	Harr. Min.	63,900	.42	.48	.40	.41
.24	.13	...	Hasaga	3,000	.16	.16½	.15	.15
.20	.13	...	H'd of Lakes	10,500	.13½	.14	.13	.14
2.09	1.06	...	Headway	41,600	1.10	1.24	1.06	1.10
.39	.10	...	Heath	79,500	.27	.29	.24½	.27
.15	.05¾	...	Heva G.M.	256,250	.09	.10	.08	.09
.97	.70	...	High Bell	500	.85	.65	.85	.85
30.12½	22.37½	24	Hollinger	3,275	26.50	27.75	26.00	26.00
10.87½	6.95	...	Hoyle	13,800	7.80	7.95	7.75	7.85
97.50	84.00	*3.75 +1.00	Hudson Bay	2,791	86.50	86.50	84.25	85.00
.41	.09	...	Hudson R.	129,350	.39	.40	.36	.39
.55	.28	...	Hugh Pam.	14,000	.48	.47½	.45	.45
.31½	.09	...	Imperial	18,000	.17	.18	.16	.16½
.86	.15	...	Indian L.	173,270	.22	.28	.21	.24
.07½	.04½	...	Indian M.	1,000	.05	.05	.05	.05
1.74	1.10	...	Inspiration	103,459	1.20	1.34	1.16	1.27
110.37½	78.25	*▲1.95	Int. Nickel	15,202	104.50	104.75	102.50	104.00
131.87½	126.50	▲7%	Do. pfd.	245	128.00	128.00	128.00	128.00
6.62½	6.25	▲7%	Do. $5 pfd.	nil	....	6.25	6.50	6.25
1.80	.50	...	Int. Ranw'k	25,750	.45	.75	.50	.73
4.75	2.50	...	Iron Bay	3,400	2.90	2.90	2.50	2.70
3.85	2.50	...	Irish Cop.	8,400	2.60	2.65	2.50	2.55
.02½	.01	...	Island Lake	nil	....	.02½	.03	.02½
.35	.21	...	Iso. Uran.	3,000	.23	.23½	.23	.23½
1.30	.20	...	Jackson M.	666	.25	.23	.20	.23
.40	.19½	▲†.04 +.00½	Jack Waite	3,000	.20	.24½	.20	.23
.52	.26	...	Jacobus	6,450	.29½	.30	.27½	.27½
.36	.20	...	Jardun	6,000	.20	.21	.20	.20
1.38	.51	...	Jaye	29,600	.90	.98	.85	.85
.94	.28	...	Jeanette	57,185	.62	.60	.52	.54
....	....	...	Jeep	nil	....	....	....	.22
.28	.09½	...	Jellicoe	322,613	.24	.27	.22	.25
.34	.14	...	Joburke	29,400	.16	.16	.15	.15
1.59	.98	...	Joliet Que.	38,900	1.13	1.15	1.05	1.07
.50	.22	...	Jonsmith	37,700	.23	.24½	.22	.22
1.39	.89	...	R. J. Jowsey	7,479	1.14	1.05	1.00	1.01
.12½	.08	...	Kenville	11,500	.09	.10	.09	.09
22.00	17.25	.80	K. Addison	2,843	17.75	18.50	17.50	18.00
.94	.40	...	Kerr Lake	1,000	.50	.60	.60	.60
.13½	.08	...	Keyboycon	18,000	.08½	.09	.08	.08
.90	.50	...	Keymet	5,600	.60	.60	.56	.60
5.10	3.00	...	Kilembe	4,800	3.50	3.70	3.50	3.50
3.20	1.35	...	Do. warr.	23,925	1.60	1.59	1.50	1.50
.95	.32	...	Kirk H. Bay	98,882	.70	.70	.65	.70
2.09	1.50	...	Kirk Min.	42,432	1.75	1.98	1.75	1.92
.49	.20	...	Kirk. Town	4,500	.22	.22	.21	.21
.43	.14	...	Kontiki L'd	1,500	.15	.16	.16	.16
.05	.02½	...	Koot. Base.	nil	....	.03	.04	.03
25.00	18.00	...	Labrador	2,020	21.50	21.50	20.00	20.00
3.75	.55	...	Lake Cinch	10,550	.75	.75	.70	.75
3.55	1.95	...	L. Dufault	19,375	2.40	2.49	2.25	2.35
.25	.13	...	L. Lingman	12,750	.15	.15½	.15	.15
.38	.18	...	Lake Osu	8,500	.20	.20	.18	.18
6.00	4.15	‡.10	Lake Shore	670	4.30	4.30	4.15	4.15
.37	.20	...	Lake Wasa	1,500	.23	.23	.22½	.22½
4.45	2.65	.10	La Luz	1,900	4.05	4.05	3.80	4.05
3.55	2.60	*.10	Lamaque G.	907	2.90	2.85	2.80	2.80
1.08	.68	*.06	Leitch Gold	6,900	.95	1.00	.90	.90
.41	.12½	...	Lencourt	18,050	.16	.16	.15	.15
.35	.18½	...	Lexindin	10,500	.22	.22	.20½	.20½
.24	.15	...	Lingside	13,900	.15	.16	.15	.15
2.50	.65	...	Lithium	1,900	.78	.82	.70	.70
3.35	1.29	...	Little L.L.	14,760	2.00	2.13	1.96	1.96
.28	.06½	...	Lomega	96,782	.18	.18	.15½	.16
2.18	.99	...	Lorado Ur.	27,425	1.15	1.19	1.10	1.10
.40	.22	...	Louvicourt	10,000	.25	.25	.22	.22
2.50	1.20	...	Lyndhurst	47,500	1.60	1.70	1.47	1.50
.17½	.08	...	Lynx Yk.	6,000	.10	.10	.09½	.09½
2.30	1.88	*.09 +1.03	Macassa	5,760	1.95	1.95	1.88	1.95
1.51	.75	...	MacDonald	9,570	.80	.78	.75	.78
.24½	.12	...	Macfie	7,400	.14	.15	.13	.15
.62	.32	...	Mackeno	223,100	.53	.59	.51	.52
1.63	1.19	*.05	Macleod	11,400	1.30	1.30	1.23	1.25
2.70	2.15	*.05	Mad R.L.	12,400	2.15	2.30	2.20	2.30
.21½	.11	...	Magnet	9,800	.11	.12	.11	.11½
2.65	1.40	*.02	Maalrtic G.	3,100	1.45	1.42	1.40	1.40
.41	.19	...	Maneast Ur.	4,000	.24	.24	.23	.23
.49	.17	...	Maralgo	3,650	.28	.30	.27	.30
.35	.17	...	Marcon	16,250	.20	.18	.17	.17
.12½	.08½	...	Marcus G.	3,000	.09½	.09	.08½	.08½
5.20	2.15	...	Maritimes	48,525	2.72	2.76	2.65	2.65
3.50	.62	...	Do. warr	24,250	.65	.73	.62	.62
.39	.13	...	Martin McN.	22,500	.14½	.14½	.13	.13
.65	.20	...	Massberyle	nil	....	....	....	.25
.95	.60	...	Matachewan	nil	....	.60	1.20	.63
2.20	.88	...	Maybrun	69,600	1.22	1.25	1.12	1.15
95.50	79.87½	2.00 +*1.00	McIntyre	838	86.50	86.50	82.50	83.00
.45	.31	...	McK. R.L.	9,300	.35	.35½	.32	.34
.35	.12	...	McMarmac.	12,500	.14½	.13	.12	.12
.70	.29¾	...	McWatters	6,500	.41	.40	.35	.35
1.37	.45	...	Mentor Exp.	4,700	.64	.60	.56	.56
.56	.25½	...	Mercedes	18,136	.48	.49	.43	.43
4.65	2.55	...	Merrill Is.	49,090	2.90	2.90	2.70	2.71
.47	.23	...	Meta Ur.	55,000	.27	.28	.25	.25
3.20	.81	...	Midrim	106,125	1.58	1.70	1.55	1.58
1.07	.45	...	Midwest	3,500	.75	.74	.72	.74
2.80	1.25	...	Milliken L.	81,050	1.55	1.60	1.39	1.43
.42	.17½	...	Mindamar	4,100	.21	.23	.22	.22
29.37½	22.25	*.50 +1.25	Min'g Corp.	2,405	25.00	25.00	24.50	25.00
.95	.50	...	Min-End	20,150	.55	.56	.50	.50
1.00	.22	...	Min-Ore	5,863	.25	.25	.22	.24½
1.40	.66	...	Mogador	5,500	.85	.80	.71	.80
3.95	2.90	...	Mogul	12,935	3.20	3.40	3.15	3.20
1.74	1.10	...	Molyb'nite	1,500	1.18	1.20	1.12	1.15
.90	.66	*.05	Moneta	5,485	.70	.72	.66	.66
3.25	2.00	...	Montgary	28,500	2.70	2.70	2.55	2.57
.11½	.06½	...	Montpas	8,500	.08	.08	.07½	.08
1.83	1.20	...	Multi-Min.	3,158	1.25	1.27	1.25	1.25
2.15	1.00	...	Nama Cr.	18,825	1.15	1.18	1.00	1.01
1.47	.50	...	Nat. Ex.	16,450	.56	.59	.53	.56
.45	.22	...	Nello Min.	1,550	.24	.22½	.22½	.22½
4.10	1.20	...	Nesbitt L.	9,900	1.30	1.40	1.25	1.25
.41	.15	...	N. Alger	16,567	.18½	.18	.15	.16½
.93	.50	...	N. Athona	97,605	.54	.89	.55	.75
.31	.15	...	N. Bidla'que	9,000	.15	.16½	.15	.16½
1.30	.60	...	N. Calumet	11,300	.70	.72	.60	.60
1.15	1.01	...	N. Delhi	32,440	1.01	1.01	1.01	1.01
2.05	1.50	*.05	N. Dick'n	6,505	1.57	1.65	1.56	1.57
.64	.08	...	N. Forma'e	413,100	.30	.60	.52	.57
.48	.31	...	N. Fortune	113,895	.30	.35	.30	.33
.35	.17	...	N. G'dvue	17,351	.22	.22	.20	.20
.40	.19	...	N. Har'na	4,500	.31	.31	.31	.31
1.19	.50	...	N. H'ridge	25,700	.64	.65	.52	.62
.50	.19	...	N. Hosco	4,675	.28	.27	.19	.19
.70	.14	...	N. Jack L.	97,100	.70	.70	.66	.70
.54	.16	...	N. Jason	21,000	.20½	.20	.18	.18
.33	.16	...	N. Kelore	13,200	.19	.22	.16	.22
5.65	4.50	...	Newkirk	9,990	5.65	5.65	5.25	5.65
.89	.35	...	N. Lafayette	7,000	.40	.40	.38	.40
1.14	.40	...	Newlund	35,825	.52	.51	.40	.41
1.55	.70	...	N. Man.	20,600	1.16	1.25	1.10	1.15
.98	.22	...	N. Minda-S.	81,050	.44	.49	.43	.49
.27	.14	...	N. M'l'que.	12,010	.14	.15½	.14	.15½
.17	.11	...	Newnorth	25,000	.14	.16	.13	.15½
2.05	1.46	...	N. Pac. Coal	5,600	1.89	1.89	1.80	1.80
.31½	.15	...	N. Rouyn	5,750	.17	.17	.15	.17
7.60	2.38	...	N. Royran	78,402	4.25	4.25	4.00	4.10
.16	.09	...	N. Santiago	8,200	.14	.14½	.13½	.13½
.30	.08½	...	N. Senator	2,120	.09½	.09	.09	.09
.37	.22½	...	N. Taku	nil	....	.24	.25	.24
.35	.13½	...	N. Thurbois	19,400	.15	.15	.14	.14½
1.00	.10	...	N. Vinray	30,000	.11	.13	.11	.11

Range 1956 High	Low	Div. Rate $	Company	♦ Sales	Last Sept. 7	Week Ending September 14 High	Low	Close
5.05	1.37	...	Nickel Rim	33,500	4.35	4.45	4.00	4.10
5.25	2.57	...	Nipissing	4,850	3.75	3.75	3.65	3.75
.43	.09	...	Nisto	14,500	.13	.14½	.13	.14
.15	.10	...	Nocano	7,500	.10	.11	.10	.11
1.46	.51	*.01½	Nor-Acme	11,700	.82	.80	.75	.75
66.62½	51.50	2.00	Noranda	6,434	62.87½	64.00	61.25	61.75
.56	.15	...	Norgold	10,000	.17	.17	.17	.17
.17	.10	...	Norlartic	2,000	.14	.14	.14	.14
7.90	6.60	*.45	Normetal	4,280	6.95	7.00	6.90	6.95
2.00	.46	...	Norpax	1,366,824	1.62	2.00	1.70	1.87
.14¾	.07½	...	North Inca	16,000	.08½	.08½	.07½	.08
1.67	.80	...	N. Rankin	63,600	1.45	1.45	1.38	1.38
2.00	.56	...	North Can.	4,500	1.10	1.30	1.20	1.30
5.05	3.15	...	North-Span.	59,905	4.85	4.95	4.30	4.40
.51	.24	...	N.W. Vent	1,200	.28	.25	.24	.25
.85	.31	...	Norvalie	11,250	.45	.45	.35	.37
.10	.03	...	Nuclear	nil	....	.03½	....	.03½
.85	.37	...	Nudulama	24,475	.42	.41	.37	.40
.75	.30	...	Obalski	35,850	.43	.44	.29	.40
.27	.10	...	Obaska	12,000	.10	.10	.09½	.09½
1.30	.68	*.02	O'Brien	3,000	.85	.83	.83	.83
.41	.11½	...	Ogama	59,600	.28½	.30	.26½	.26½
1.30	.71	...	Oka	14,800	.85	.85	.75	.75
.45	.23	...	O'Leary	14,500	.25	.25	.24	.25
.12	.04	...	Omnitrans	31,750	.07½	.09	.07	.08
1.02	.48	...	Opemisca	26,300	.69	.68	.61	.65
19.87½	8.20	...	Opemiska	18,635	15.12½	15.00	14.37½	14.50
.27	.16	...	Orchan	1,000	.18½	.20	.20	.20
.57	.20	...	Orenda	86,700	.40	.41	.33	.33
.94	.40	...	Ormsby	11,200	.45	.58	.47	.47
.63	.38½	...	Osisko	12,000	.43	.41½	.38½	.40
.16	.11	...	Pac. East	11,500	.11½	.12½	.11	.12½
.62	.27½	...	Pac. Nickel	162	.55	.55	.46	.55
.02½	.01½	...	Packsack	4,000	.02	.01½	.01½	.01½
.78	.51	...	Pamour P.	nil	....	.52	.58	.54
.22	.09½	...	Paramaque	19,500	.14	.13	.12½	.13
.19	.10½	...	Parbec	52,000	.11½	.11½	.10½	.10½
1.53	.70	...	Pardee	16,161	.75	.75	.70	.75
1.90	.73	...	Pater	7,350	.95	.90	.85	.90
6.75	4.60	*.10 +‡.75	Pato Cons.	5,285	4.80	4.85	4.70	4.75
.39½	.27	‡.01½	Paymaster	14,650	.28	.29	.27	.27
.15½	.15½	...	Pegasus	nil	....	....	....	.15½
5.15	3.60	†1.25	Pend Oreille	1,880	3.75	3.75	†3.50	3.75
.34	.25	...	Perron Gold	500	.25	.26	.26	.26
2.25	1.30	.10	Pickle Crow	1,440	1.30	1.35	1.32	1.32
2.10	1.70	*.12½	Pioneer G.	400	1.82	1.70	1.70	1.70
.18	.10	...	Pitch-Ore	15,400	.11½	.12	.11	.11
.36	.15	...	Pitt G.	39,300	.18	.19	.17½	.18
14.87½	12.00	.50	Placer Dev.	5,223	13.25	14.00	13.25	13.25
.33	.13½	...	Porc. Prime	16,000	.15	.15	.15	.15
1.43	.27	...	Portage	61,800	.86	.89	.75	.75
.68	.50	1.20	Powell R.	3,100	.53	.50	.50	.50
.23½	.05½	...	Prem. Bord	75,400	.15	.17	.14	.17
8.30	5.60	.08	Preston E.	3,630	6.85	6.75	6.40	6.40
9.40	5.10	...	Pronto	2,565	5.20	5.25	†5.00	†5.00
5.40	1.80	...	Do. warr.	810	2.00	2.00	1.80	1.80
2.55	1.50	...	Prospectors	1,000	1.99	1.90	1.85	1.85
.45	.15	...	Purdex	20,800	.25	.25	.23	.23
.90	.36	...	Quatsino	6,500	.55	.58	.55	.58
4.85	1.65	■*	Que. Chib.	53,325	2.25	2.30	2.06	2.12
3.50	1.56	...	Que. Cop.	13,700	1.67	1.70	1.56	1.60
.32	.09½	...	Que. Lab.	40,000	.17	.17½	.16	.16½
15.00	9.85	...	Que. Lith.	4,190	12.25	12.25	10.75	10.75
1.94	.90	...	Que. Man.	7,800	1.02	1.05	.90	.90
4.60	2.80	...	Que. Met.	15,555	3.05	3.00	2.80	3.00
1.35	.44	...	Q. Smelt.	1,208,700	.96	1.35	.90	1.22
.30	.19	...	Queenston C.	5,100	.24	.24½	.20	.20
30.00	24.25	*1.50	Quemont	3,772	25.25	25.50	24.25	24.50
1.80	1.00	...	Radiore	116,400	1.00	1.15	1.00	1.10
2.50	1.30	...	Rainville	3,633	1.88	1.85	1.55	1.66
6.05	1.70	...	Rare Earth	23,575	2.19	2.20	1.95	1.95
2.85	1.55	...	Rayrock	25,335	1.60	1.65	1.59	1.59
.05	.02	...	Red Cloud	nil	....	.02½	.03½	.03½
.39	.13½	...	Red Crest	143,300	.30	.30	.28	.29
.15	.03½	...	Red Hawk	24,000	.10	.10	.09½	.10
2.70	1.90	.12½	Reeves McD.	100	2.00	1.92	1.92	1.92
2.80	2.25	*.15	Renabie	300	2.40	2.30	2.30	2.30
.75	.19	...	Rexspar	117,550	.43	.50	.40	.45
.08	.01½	...	Rice Lake	nil	....	.02	.05	.04
.34	.20	...	Rio-Rup.	18,373	.22	.22	.20	.20
1.20	.69	...	Rix-A'basca	8,500	.70	.73	.69	.70
.26	.14	...	Roche L.L.	7,400	.14½	.14½	.14	.14½
.70	.25	...	Rockwin	5,599	.31	.30	.25	.26
.34¾	.12	...	Rowan Con.	36,250	.17	.16½	.13½	.14
.24	.14	...	Ryanor	4,000	.17	.18½	.15½	.16
1.19	.29	...	St. Michaels	66,400	.36	.37	.29	.31
1.47	.76	‡.06	San Antonio	2,300	.80	.80	.80	.80
.30	.11	...	Sand River	45,200	.22	.23	.20	.20
....	....	...	Scotia Gold	nil	....	.00½	....	.01½
.29	.09	...	Shawkey '45	27,500	.15	.17	.15	.16
2.25	1.25	*.05	Sheep Creek	1,440	1.40	1.41	1.25	1.25
10.37½	7.75	...	Sherritt G.	26,927	8.70	8.80	8.40	8.45
5.40	4.55	.40	Sigma Min.	375	4.85	4.85	4.85	4.85
.27	.11	...	Silanco	10,500	.12	.13	.12	.12
.25	.12	...	Silbak Prem.	2,502	.24	.25	.23	.24
1.70	.93	*.03	Silver M.	20,416	1.11	1.15	1.10	1.13
.37	.08	...	Silver R.	42,000	.11	.08½	.08	.08½
.80	.36	‡.02	Silver St'd	5,000	.50	.50	.50	.50
1.16	.52	*.01½	Siscoe	5,800	.84	.86	.83	.85
.47	.15	...	Skeena	10,000	.15	.19½	.17	.18
.31	.19½	...	Slocan	1,700	.22	.24	.22	.24
.16	.08	...	Soma Duv.	8,500	.09	.10	.09	.09½
.61	.17	...	South Duf.	2,000	.18	.18	.17	.17
.30	.03	...	Spud Valley	10,000	.18	.18	.15	.16
.55	.28	*.02	Stad'n '44	5,866	.29	.30	.28	.28
.45	.25	...	Standard G.	2,000	.30	.28	.28	.28
3.15	2.70	...	Stanleigh	12,150	2.90	2.95	2.75	2.80
.02	.00¾	...	Star Lake	nil	....	.01	.02	.00¾
.90	.42	...	Star Uran.	10,600	.89	.88	.80	.88
.20¾	.08½	...	Starrat O.	17,500	.09	.10	.09	.10
.18	.10	...	Steeloy	8,000	.10	.10½	.10	.10
24.75	15.00	...	Steep Rock	19,765	22.12½	22.50	21.62½	21.62½
1.20	.56	...	Sturgeon R.	19,900	.70	.68	.65	.65
.22½	.14	...	Sudbury G.	10,400	.18	.16	.15	.16
6.70	4.40	*.12 +.02	Sullivan C.	16,740	4.75	4.70	4.40	4.55
.40	.25	...	Sunshine	8,100	.36	.32	.30	.31
1.86	1.02	...	Surety	9,000	1.08	1.10	1.04	1.08
.20	.08	...	Surf. Inlet	15,000	.09½	.09	.09	.09
1.43	1.20	.08	Sylvanite	5,700	1.21	1.21	1.20	1.20
.72	.21	...	Tache Lake	199,800	.59	.63	.53	.55
.14½	.09	...	Tandem	85,048	.10	.14	.09	.11
.45	.20	...	Tarbell	2,700	.35	.30	.26	.28
.47	.38	...	Taurcanis	nil	....	.40	.44	.38
.28	.20	...	Taylor B.	nil	....	.22	.25	.22
.25	.12	...	Tazin	29,500	.14	.14	.12	.12
2.75	1.80	.15	T. Hughes	6,530	1.86	1.90	1.85	1.90
9.00	2.25	...	Temagami	2,375	6.50	6.45	6.10	6.10
3.00	1.31	...	Thompson	10,850	1.67	1.60	1.40	1.50
.54	.17	...	Tiara	8,150	.19	.22	.17	.18
.85	.12½	...	Tiblemont	3,000	.50	.50	.50	.50
.58	.32	...	Tombill	5,000	.40	.40	.39	.40
1.25	.63	‡.08	Torbrit S.	1,000	.65	.65	.65	.65
4.10	2.15	...	Torbrook	24,675	4.00	3.95	3.80	3.90
.32	.13	...	Towagmac	6,100	.17	.17	.16½	.17
2.50	1.50	...	Trs. Can. E.	7,467	1.60	1.75	1.55	1.68
.53	.34	...	Trans. Res.	6,050	.35½	.36	.34	.34
.70	.19	...	Trebor	28,300	.50	.48	.39½	.40
.47	.35	...	Trinity	1,250	.41	.37½	.38	.38
2.65	.30	...	Trojan	196,700	.62	.65	.57	.64
.37	.20½	...	Union Min.	7,733	.23	.23½	.22	.22
8.60	6.55	...	United Ash.	5,690	7.20	7.20	6.90	6.90
.36	.18	...	Un-Estella	3,700	.19½	.19	.18	.18
8.00	6.00	*.30 +.10	Un. Keno.	2,375	6.50	6.75	6.30	6.30
.40	.20	...	Un'd Mont.	5,955	.21	.21	.20	.20
1.34	.84	*.02½	Upper Can.	43,800	1.03	1.02	.85	.94
.10	.01	...	Utica	nil	....	.04	.05	.05
.48	.23	...	Valor	15,500	.26	.26	.24	.25
.12½	.02½	...	Van'da '48	4,000	.06	.05	.05	.05
49.00	35.50	*.40	Ventures	5,086	43.00	42.50	40.75	41.00
1.92	.27	...	Vico	168,120	.36	.36	.27	.33
3.40	1.71	...	ViolaMac	13,450	2.15	2.10	2.00	2.05
3.10	1.98	...	Virginia	26,500	2.35	2.40	2.14	2.29
15.25	14.00	1.40	Waite Am.	4,517	14.12½	14.37½	14.00	14.00
.80	.43	...	Weedon Pyr.	22,200	.57	.56	.52	.52
.14¾	.07	...	Wendell	55,000	.07½	.08	.07½	.08
.75	.38	...	Werner Lk.	35,300	.47	.48½	.40	.40
.65	.40	...	West Ex.	1,000	.60	.60	.60	.60
.31	.08½	...	West Mal.	19,600	.16	.16	.15	.15
.45	.14½	...	Westville	125,900	.34	.36	.29½	.29½
3.40	2.17	...	Willroy	24,780	2.90	3.10	2.86	2.90
.17½	.10	...	Wiltsey C.	31,500	.16	.16	.15	.15
.16½	.09½	...	Winchester	14,000	.11	.11	.10	.10½
.52	.23	...	Windw'd	14,000	.25	.23	.23	.23
.08	.03½	...	Wpg. R. Tin	nil	....	....	....	.05
2.07	1.65	.12	Wright-Har.	4,900	1.70	1.75	1.65	1.71
.55	.32	*.02	Yale Lead	4,500	.33	.32	.32	.32
.21	.10	...	Yellorex	43,000	.11½	.15	.11	.14
3.00	2.05	*.06	Y'ke Bear	19,285	2.15	2.15	2.10	2.12
.14	.10	...	Yukeno	4,500	.10	.11	.10	.10
.72	.57	‡.06	Yukon Cons.	3,000	.65	.67	.65	.67
.70	.30	...	Zenmac	39,663	.32	.35	.30	.32
.60	.36	...	Zulapa	1,625	.45	.45	.45	.45

Oil Stocks

Range 1956 High	Low	Div. Rate $	Company	♦ Sales	Last Sept. 7	Week Ending September 14 High	Low	Close
.33	.17	...	Acme G&O	4,000	.21½	.20	.18½	.19
1.07	.62	...	Ajax	58,100	.97	1.07	.93	.95
.08	.08	...	Albedina	nil	....	.03½	.04½	.03½
.66	.29	...	Alta. P. Con.	4,176	.53	.53	.50	.53
.06	.02½	...	Aldina	2,000	.04½	.03½	.03½	.03½
.35	.22	...	Altex	10,000	.30	.30	.29	.30
.07	.03½	...	Amalta	nil	....	.03½	.04	.04
1.50	.77	...	Amer. Led.	411,232	1.04	1.17	.91	1.14
1.00	.80	...	Amos	21,500	....	1.00	.80	1.00
7.40	5.60	...	Amurex	100	6.75	7.00	7.00	7.00
.25	.8½	...	Anchor	29,000	.15½	.16½	.14½	.15
16.87½	12.75	...	Anglo-Am.	600	14.37½	15.00	14.25	15.00
.25½	.11	...	Apex	93,950	.16	.17½	.15	.16
20.00	8.80	...	Bailey-S. A	4,605	19.00	19.00	17.75	18.50
40.00	25.00	1.25	Do. 5% deb.	1,055	38.00	38.00	36.00	36.00
4.20	1.16	...	Banff	12,850	3.50	3.80	3.55	3.55
.10	.04	...	Barons	5,000	.04½	.04½	.04½	.04¾
.67	.50	...	Basco	1,500	.54	.51	.50	.50
.18	.09	...	Bashaw	5,500	.15½	.16	.15½	.16
.19	.12	...	Bata	7,100	.14	.14	.13	.13
.40	.19	...	Blue Crown	3,433	.23	.25	.21	.25
.68	.45	...	Bonnyville	20,367	.53	.51	.48	.50
1.45	.98	...	Bralsaman	1,900	1.03	1.10	1.02	1.10
4.30	2.31	...	Britalta	17,325	3.40	3.45	3.25	3.35
.11	.05	...	Br. Pete	7,500	.06½	.07	.06	.06½
1.95	1.35	...	Cabanga	6,500	1.85	1.95	1.85	1.85
.10	.05	...	Do. rts.	11,473	.08	.08½	.05	.07
1.60	.54	...	Calalta	15,660	1.40	1.45	1.35	1.40
33.00	19.37½	.10	Calg. & Ed.	4,040	29.50	29.50	28.50	29.25
6.75	5.00	...	Calvan	1,000	5.40	5.30	5.00	5.00
4.00	1.90	...	Canada Oil L.	6,350	3.00	3.15	2.95	2.95
2.25	.92	...	Do. warr.	2,725	1.85	1.85	1.85	1.85
.74	.40	...	Canadian Ad.	9,966	.53	.55	.48	.52
.44	.13	...	Cdn. Ana'da	9,855	.38	.35¾	.32	.32
9.00	5.65	...	Cdn. Atlan.	10,855	7.40	7.40	7.00	7.15
.95	.55	...	Cdn. Br. E.	35,460	.55	.66	.55	.63
.80	.30	...	Cdn. Dec. w.	4,000	.72	.70	.65	.69
9.35	2.90	...	Cdn. Dev.	35,470	7.20	7.35	6.85	6.90
.10½	.05	...	Cdn. Emjay	11,500	.06	.06½	.05½	.05½
7.50	5.25	...	Cdn. Ex. G.	1,385	6.00	6.00	5.90	5.90
.35	.16	...	Cdn. F'tune	3,000	.17	.17	.17	.17
2.70	1.99	...	Cdn. H'stead	*8,650	2.40	2.40	2.30	2.30
4.60	2.74	...	Cdn. PL&P	32,357	3.85	3.85	3.70	3.80
6.50	4.20	...	Cdn. Prosp.	900	5.75	5.65	5.25	5.25
3.10	1.53	...	Cdn. Scotia	41,000	2.05	2.35	2.00	2.35
4.50	2.65	...	Cdn. W'ston	200	3.25	3.30	3.30	3.30
2.15	1.50	...	Canadusa	4,220	1.62	1.62	1.60	1.60
1.85	1.00	...	Canso Gas	18,853	1.35	1.85	1.45	1.80
6.35	1.57	...	Canso Pet.	26,277	5.75	6.25	5.10	5.40
3.20	1.89	...	Canso Prod.	21,317	2.60	3.20	2.65	2.71
1.35	.35	...	Canso warr.	4,900	1.00	1.25	1.00	1.20
.57	.39	...	Carleton	41,650	.47	.57	.44	.57
.35	.10	...	Castle O&G	10,381	.17	.21	.16	.21
6.00	4.00	...	Cent. Explor.	100	4.10	4.00	4.00	4.00
6.00	2.11	...	Cent. Leduc	22,785	5.00	5.10	4.85	4.00
.65	.20	...	Century	79,600	.36½	.40	.30	.40
2.50	1.66	...	Charter	15,000	2.28	2.35	2.10	2.10
.32	.16	...	Claybar	8,400	.18	.18	.16	.16
....	....	...	Coastal	nil	....	.70	....	†.85
.82	.75	...	Com. Min'ls	24,500	....	.86	.75	.86
1.25	1.00	*.06	Command	602	†.96	1.10	1.00	1.07
4.10	3.35	*.20	Commoil	nil	....	....	....	3.90
5.50	4.10	‡.36	Common P.	1,000	5.10	5.25	4.95	5.00
.22	.15	...	Cons. Allen	8,900	.16	.17	.15½	.18
.40	.25	...	Cons. Cord.	1,000	.26	.26	.26	.26
.78	.35	...	Con. Dragon	118,575	.74	.78	.68	.77
.85	.60	...	Cons. East C.	1,400	.60	.65	.65	.65
.06½	.03	...	Cons. Gr. C.	6,000	.05½	.05	.05	.05
5.40	2.50	...	Cons. Mic. M.	51,237	5.15	5.35	5.10	5.15
.19¾	.10	...	Cons. Peak	7,125	.13½	.15	.12	.14
15.15	8.65	...	Con. W. Pet.	3,900	11.50	11.50	10.50	10.62½
6.60	3.90	...	Cree Oil	7,215	6.00	6.00	5.80	5.95
3.00	2.50	...	Do. warr.	nil	....	....	....	2.50
.29	.17	...	Dalhousie	6,241	.18½	.24	.22	.22
4.90	1.42	...	Del Rio	37,738	3.95	4.10	3.80	3.85
1.99	1.45	...	Dev. Leduc	13,770	1.65	1.70	1.55	1.61
10.00	5.50	...	Dome	100	9.00	8.50	8.50	8.50
.17	.08½	...	Dom. Min'ls	7,300	.09	.10	.09	.09½
.65	.10	...	Dubar	31,500	.29	.29	.24	.24
2.10	.60	...	East Con.	13,500	1.19	1.19	1.00	1.10
.17	.09	...	Edoran	11,500	.10	.10	.09½	.10
.55	.28	...	Emp. Oil.	9,200	.36	.36	.33	.33
3.60	1.90	...	Fargo	3,525	3.05	3.00	2.81	2.85
3.40	.40	...	Ft. St. John	8,300	3.15	3.20	2.85	2.90
.04½	.01½	...	Freehold	700	.03½	.02¾	.02½	.02½
.65	.29	...	Futurity	7,500	.40	.40	.35	.37
.72	.10	...	Gaspe	15,000	.20	.20	.16½	.18
.11	.06½	...	Gateway	1,900	.06½	.07½	.06½	.06½
7.00	4.70	.20	Gen. Pet.	500	5.85	5.60	5.50	5.60
7.00	4.65	.20	Do. A	2,495	6.10	5.90	5.50	5.60
.11	.06	...	Golden Sp.	7,500	.08½	.08	.07¾	.07¾
54.50	25.75	...	Gt. Plains	1,030	48.00	49.50	45.00	45.00
5.85	3.00	...	Gt. Sw. Gr.	134,069	3.15	3.40	3.00	3.15
13.25	9.00	...	Gridoil	700	11.75	11.25	11.00	11.25
.05½	.04	...	Hargal	14,500	.03	.03¾	.03	.03½
.24	.12	...	Henderson	1,000	.12	.11	.11	.11
.50	.19	...	High C'rt	19,700	.40	.40	.38	.38
.58	.12	...	High Sarcee	38,600	.38	.38	.35	.37
11.00	7.00	*.30	Hi-Tower	nil	....	10.00	10.25	10.25
16.50	10.25	♦♦*.12½	Home A	4,369	14.37½	14.00	13.37½	13.62½
15.87½	10.12½	..	Do. B	2,006	13.87½	14.00	12.75	13.00
14.00	8.35	...	Husky	2,796	13.50	13.75	12.75	12.75
7.20	3.40	...	Do. warr.	2,240	6.80	7.20	6.60	6.75
2.00	.87	...	Israel Cont.	1,600	.90	1.00	.87	.90
.25	.16½	...	Jump. Pd.	3,000	.16½	.19½	.19½	.19½
3.10	2.05	...	Jupiter	2,800	2.30	2.35	2.20	2.20
.41	.04½	...	Kenare	22,300	.21	.20	.17½	.19
.39	.18	...	Keno	6,200	.19	.20	.18	.20
2.75	1.10	...	Kroy	23,400	2.30	2.30	2.15	2.20
.40	.19	...	Leduc. Cal.	10,500	.21¾	.22	.20	.20
3.65	2.70	...	Liberal	16,250	2.85	2.90	2.70	2.70
.24	.10	...	Long Is. P.	37,300	.21	.21	.17	.17
.47	.24	...	Marigold	32,400	.31	.33	.30½	.31
.06	.02	...	Marvel	nil	....	.05	.06	.06
.84	.18	...	Merland	23,466	.76	.79	.66	.68
22.50	11.75	...	Merrill Pet.	540	17.50	17.25	16.50	16.75
1.50	.75	...	Midcon	103,560	1.20	1.32	1.14	1.31
.45	.23	...	Mill City	19,671	.24	.33	.30	.30
3.20	.60	...	Mollusca	600	1.85	1.85	1.80	1.85
.36	.12	...	Monarch	50,050	.25	.29	.20	.29
6.95	3.10	...	Nat. Pet.	2,500	4.35	4.95	4.30	4.85
2.08	1.01	...	N. Bristol	12,400	1.05	1.18	1.06	1.14
3.25	2.01	...	N. British	17,536	2.40	2.70	2.40	2.45
2.39	1.50	...	N. Chamb'n	33,425	2.35	2.39	2.30	2.30
.59	.35	...	N. Concord	2,920	.37	.41	.40	.40
.90	.62	...	N. Cont.	175,930	.72	.85	.68	.81
.35	.16	...	N. Davies	6,500	.22½	.23	.23	.23
2.15	1.48	...	N. Gas Exp.	4,350	1.62	1.62	1.50	1.56
.10½	.06½	...	New Ranch	25,500	.10	.09¾	.09	.09¾
.35	.11	...	N. Richfield	8,625	.13	.13	.11	.11
.23	.07½	...	N. Springer	13,250	.18	.18½	.17	.17
3.00	2.15	...	N. Superior	1,866	2.50	2.51	2.50	2.50
.50	.06½	...	N. World	nil	....	....	....	.06½
.40	.18	...	Nordon	500	.20	.18	.18	.18
1.59	1.30	...	Northcal	4,800	1.45	1.45	1.30	1.35
7.35	4.50	...	North Can.	3,200	6.90	7.00	6.60	6.60
40.00	35.87½	...	Do. 5¼% pf.	220	38.00	†45.75	37.50	37.50
4.00	1.75	...	Do. warr.	695	3.10	3.35	3.20	3.35
.04	.02	...	N. Cont.	4,500	.03¼	.03	.03	.03
1.31	.55	...	Northland	73,870	.85	.93	.80	.92
.47	.30	...	Nucco	3,985	.33½	.35	.33½	.34
.23	.08	...	Oil Select	149,200	.15	.15	.12	.12½
3.25	1.77	...	Okalta	17,675	2.93	2.90	2.70	2.80
20.12½	12.62½	...	Pac. Pete	8,195	17.25	17.62½	17.25	17.50
....	....	...	Pan Israel	nil	....	....	....	2.65
.43	.27	...	Pan West	12,600	.34	.34	.30	.30
6.75	4.75	*.25	Parker Drill	nil	....	5.75	6.00	6.00
1.94	.75	...	Pathfinder	767,526	1.55	1.57	1.40	1.55
13.00	7.85	...	Peace River	1,960	10.25	10.62½	10.50	10.62½
2.40	2.11	...	Permo	157,850	....	2.40	2.11	2.11
3.40	1.85	...	Peruvian	6,200	2.03	2.00	1.89	1.90
2.25	.99	...	Petrol O.	52,550	1.03	1.34	1.01	1.20
1.95	.75	...	Phillips Oil	27,799	1.45	1.50	1.40	1.45
.89	.60	...	Ponder	8,425	.75	.74	.71	.73
.62	.23	...	Pontiac	4,400	.28	.29	.25½	.25½
.35	.25	...	Poplar	nil	....	.27	.38	.33
6.90	3.30	...	Prairie	3,450	4.35	4.80	4.35	4.55
2.74	1.75	...	Provo	35,600	2.12	2.20	2.05	2.10
.30	.06	...	Que. Oil D.	30,500	.10	.11	.09	.10
.76½	.28	...	Quinalta	4,100	.40	.40	.39	.39
.06	.02¾	...	Realty	20,100	.04	.04	.03½	.04
.27	.08½	...	Reef Expl.	20,286	.12	.17	.12	.14½
.07	.03	...	Renfrew	2,500	.05½	.05	.04	.05
.25	.17	...	Ridgeway	132,300	.24	.24	.17	.19
2.65	1.70	...	Rio Palmer	16,114	2.15	2.14	2.00	2.06
.18	.10	...	Roxana	3,500	.12	.12	.11½	.11½
.12½	.07	...	Royal Can.	3,000	.08½	.09	.08½	.09
18.25	12.50	26	Royalite	5,297	16.62½	16.50	15.50	16.25
31.75	25.00	1.31½	Do. 5¼% pf.	575	31.00	30.75	30.00	30.00
.15	.07	...	Sage	11,000	.09	.12	.07	.12
3.90	2.14	...	Sapphire	18,120	2.30	2.35	2.14	2.20
157.00	90.00	...	Do. 5% deb.	161	100.00	100.00	90.00	90.00
3.90	1.75	...	Scurry-Rain.	94,870	3.75	3.90	3.60	3.70
5.10	2.55	...	Security	11,715	3.75	4.10	3.95	4.00
.20	.10	...	Select Oils	5,000	.14	.13½	.10	.10
.12	.07	...	Share Oils	22,000	.10	.10½	.10	.10
.27¾	.12½	...	Silver City	3,000	.16	.15	.12½	.12½
.45	.25	...	Souris Val.	1,000	.27	.28	.27	.28
.50	.30	...	S. West Pet.	nil	....	.40	....	.50
.90	.43	...	So. Union	8,700	.58	.60	.57	.56
.43	.22	...	Sparmac	4,500	.27	.24½	.23	.23
.60	.16½	...	Spooner	20,100	.39	.38	.35	.37
.89	.55	...	Stanwell	6,470	.75	.85	.76	.85
.25	.09¾	...	Sturgeon	4,500	.16	.13	.12	.13
1.33	.75	...	Texas Cal.	1,500	.86	.82	.80	.82
2.70	1.60	...	Trans Emp.	16,292	2.47	2.50	2.30	2.40
.54	.30	...	Trans-Era	31,000	.37	.36	.33	.35
.09	.04¾	...	Transfield	5,000	.04½	.05	.04¾	.05
.22	.13	...	Trend	31,000	.13	.16	.13	.14
12.00	5.50	...	Triad	17,251	10.12½	10.25	9.95	10.12½
.18	.05½	...	Tri-Zone	500	.08	.06½	.06½	.06½
.35	.27	...	Turner V.	nil	....	.32	....	.32
2.98	1.65	...	Utd. Oils	54,160	2.30	2.34	2.20	2.20
.40	.15	...	Vanalta	23,200	.30	.40	.32	.40
.60	.25	...	Vandoo Con.	257,230	.37	.37	.25	.25½
2.35	.82	...	Van Tor	9,200	1.75	1.72	1.68	1.68
.90	.51	...	Vulcan	3,000	.68	.68	.67	.68
.40	.22	...	Wespac	50,730	.30	.34	.28	.33
1.00	.59	...	W'burne	22,700	.96	1.00	.96	1.00
.18	.12	...	W. Ashley	17,100	.12	.14	.12	.14
2.19	1.30	...	W Decalta	23,837	1.88	1.90	1.75	1.81
.60	.20	...	Do. B warr.	7,100	.50	.55	.45	.49
8.00	5.00	...	W L'holds	205	6.05	6.10	6.10	6.10
1.70	1.30	...	W. Maygill	1,400	1.40	1.35	1.30	1.30
1.50	.70	...	W Naco	4,590	1.40	1.45	1.30	1.40
.37	.11	...	Do. warr.	10,569	.33	.25½	.25	.25
.22	.08	...	W. Warner	2,250	.12	.12	.10½	.11
.68	.40	...	Wilrich	76,200	.42	.44	.40	.43
.25	.14	...	Y'ke Can.	26,000	.17	.17	.15	.16½
1.24	.58	...	Y'ke Prin.	31,300	1.05	1.10	.98	1.02
.13	.06½	...	York Oils	10,500	.12	.12	.10	.10

■1 sh. Chib. Asb. for 10 shs. Que. Chib. ▲U. S. funds. ♦♦Initial. ‡Payable in 1955. †Less than board lot. ♦When sale shown nil the figures are bid, asked and latest sale. *Payable in 1956 to date.



Volume of Stock Sales

	Montreal	Toronto	Calgary	Vancouver	New York
Sept. 17	925,700	2,825,000	180,671	......	2,730,000
Sept. 14	976,700	3,250,000	171,901	192,188	2,920,000
Sept. 13	747,000	3,264,000	116,287	124,700	2,810,000
Sept. 12	1,118,300	4,099,000	195,088	143,937	2,890,000
Sept. 11	1,314,000	3,466,000	235,804	166,362	2,890,000

Unlisted Mines and Oils

(Compiled from quotations by G. E. Leslie & Co., Montreal)

Stock	Bid	Offr.	Stock	Bid	Offr.
Abeta	10	13	Mid Chib	61	65
Aconic	4½	5	Mill'r Cop	34	38
Adnor	4	7	Nat Mal	9	12
Atlas Ch	23	26	N Lorie	10	12
Bald Mtn	13	16	N Auger	3	5
Belmont	8	10	New Pen	5	8
Bluegrass	6	9	Nipiron	21	26
Bornite	33	38	Norbeau	90	100
Bros'n Ch	70	80	Norcopp'r	58	60
Burrex	75	90	Normiska	36	41
C Javelin	22½	33	Okelend	7	9
Cent Mng	75	100	O Nick n	35	40
Chib Cop.	70	80	M'gomery	2	4
Clinger	5	7	Orefield	35	40
C S Sim'n	19	22	Ormonte	..	30
Cont Cop	32	36	Pascalis	10	15
Cop Val'y	40	45	Pennbec	55	60
Dawmac	..	125	Power Ur	9	12
Derogan	4	7	Provincial	2	5
Enterprise	46	50	Quedon	15	20
Flicka	7	10	Quejo	10	15
Flu Bar	100	120	Rand Mal	5	7
Garland	..	20	R D'ond	88	98
Gibson	25	27	Roymont	10	20
Glencona	5	6	St Law	45	68
Goldm'que	5	7	St Jude	17	21
Imp Min'ls	9	14	Scott Ch	9	12
Independ	12	15	Selby M'g	46	52
Inter Asb	5	10	Sharbot	58	60
Int Lith	..	115	Sth Bach	..	20
Kamlac	9	11	Suzor	..	36
Kenmac	8	11	Starlight	9	11
King Cop	10	20	Titanium	75	85
Lake Chib	49	53	Tomiska	..	25
Lassie	5	8	Wesley	10	12
Lun-Echo	50	56	Wm Leys	16	18
Lynivue	42	47	Yng Dave	12	17
Main Oka	14	17			

Bond Redemptions

Bond Issues Rate Year Date Cal. Pr.

■Interprov. Pipe Line Co. 1st Mtge. & Coll. Tr. Bds. Ser. C 4% '73 Oct. 1 $100.00
‡Nat. Light & Pwr. 1st Mtge. S.F. Debs., Ser. C 4½% ...... '61 Sep. 25 Tenders
♦Ontario Steel Products S.F. debs. 5¼% '68 Oct. 1 $100.00
*Power Corp. of Can. Ltd. conv. debs., 4½% .... '68 Sep. 25 $103.00
††Somerville Ltd., 1st Mtge. S.F. Debs., Ser. A .... '73 Oct. 15 $102.25
§Steinberg's Ltd. S. F. Debs. 5¼% .. '73 Oct. 9 0100.00
■Trs. Mtn. Oil P.L. Co. 1st Mtge. & Conv. Tr. Bds. Ser. A 4½% '72 Oct. 1 †$102.92
♦Trs. Mtn. Oil P.L. Co. 1st Mtge. & Conv. Tr. Bds. Ser. B 4% '72 Oct. 1 †$102.92
▲Trs. Mtn. Oil P.L. Co. 1st Mtge. & Conv. Tr. Bds. Ser. C 4% '72 Oct. 1 †$102.92

††$98,000.
*All outstanding.
†U. S. Funds.
■$250,000.
♦$250,000.
▲$42,000.
♦$125,000.
§$100,000.
‡$74,000. Total S.F. available for this purpose.

Stock Redemptions

Company	Rate	Date	Price
▲McColl Frontenac Oil pfd. shs.	4%	Sep. 30	$102.50

▲—20,000 shs.

Investment Trusts

	Divd. pd. cents ▲		
All-Can. Com. Fd.	10.62 (20.5♦)	5.50	5.98
All-Can. Div. Fund	16 (17.25)	5.10	5.55
Balanced Mut.	13 (15)	5.17	5.68
Can. Invest. Fund	.27 (34)	9.33	10.24
Canafund	70 (110)	36.85	38.69
Champion Mut. Fund	9½	5.57	6.12
C'wealth Inter.	18 (28)	8.22	9.03
Corporate Inv.	23 (26)	8.99	9.77
Diversified Inc. Shs. B	13 (12)	4.15	4.50
Dom. Equity Inv.	15+15 (42)	...	...
Grouped Inc. (new)	5■ (10)	4.03	4.40
Growth Mines		4.78	5.02
Growth Oil & Gas		8.07	8.48
Investors Mut.	21 (30)	10.53	11.38
Leverage Fund	18 (20)	5.96	6.55
Mut. Acc. F.	13.07 (23.53)	6.85	7.49
Mutual Income	19.37 (23.42)	5.49	6.00
Resources of Can.	(6)	8.26	...
Sup'vised Amer.	8 (21)	6.28	6.34
Sup'vised Executive (1955)		36.67	...
Sup'vised Executive (1956)		30.10	31.40
Sup'vised Gr'th Fund	(4■)	2.07	2.09
Sup'vised Inc. Fund	9 (22)	4.43	4.47
Timed Invest.	7 (20)	†5.30	*5.30
Trans-Can. A	48.4 (83)	29.50	...
Do. B	47.6 (96.6)	32.00	...
Do. C	3.8 (19)	6.40	6.80

†Less or (*) plus stock exchange commission
▲Paid or payable in 1956 total paid in 1955 in parentheses.
■Plus stock divd.
♦Reinvested.

GREAT VALLEY EXPLORATION AND MINING reports a combined magnetometer and self-potential survey underway on its 800-acre property northeast of Val d'Or, Que. Company has also acquired 900 acres in Perron township and has staked 40 claims in the Lac La Treve area of Chibougamau.

Commodities

	Latest week	Previous week	Same week last yr.
Cattle	$21.74	$21.34	$19.74
Hogs	27.50	27.50	27.50
Copper lb.	.40	.39	.43
Sugar, raw, lb.	.0560	.0563	.0547
Coffee, lb.	.61	.60¾	.59¼
Hides	.16	.15½	.13
Weekly Commodity Indices			
Dow Jones	161.38	160.93	154.14
U. S. Labor	115.1	■114.8	111.4
Monthly Commodity Indices			
Canada (D.B.S.)			
Retail (Aug.)†	119.1	118.5	116.4
W'sale (July)	226.6	226.5	218.4
C. F'm Pro. (July)	226.6	217.2	217.4
U. S. (June)	114.2	114.3	110.3
Gt. Brit. (June)*	155.2	■155.9	....
Do. (June)▲	135.5	135.4	....

Note: †Cost-of-Living Index Revised to the Base of 1949=100.

Base of price quotations is as follows: Cattle-Steers, good up to 1,000 lb., to price Toronto. Copper-electrotypes, New York. Coffee No 4 Santos. Spot Raw Sugar 96 degrees centrifugal c.i.f.

■Revised.

Gt. Brit. Index revised. Base year 1949.

*Basic materials index (excl. fuel) for nonfood mfg. ind.

▲All mfg. products other than fuel, food and tobacco.

GREAT NORTHERN GAS UTILITIES LTD., Edmonton, consolidated net profit for the 12 months ended June 30, 1956 was $301,129, equal to 40c per share. Figures for corresponding period a year earlier are not available. Net profit for the fiscal year ended Dec. 31, 1955 was up 38.4% at $292,330 ($211,212 a year earlier), equal to 38c (28c, after full year's dividends on preferred stock).

KIPPEN & COMPANY INC.
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(at Mavety Street)

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MEMBERS:
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Edmonton Stock Exchange
Winnipeg Grain Exchange
80 Richmond St. W. Empire 8-4831
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Norris, Adams Limited
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The Montreal Stock Exchange
The Canadian Stock Exchange
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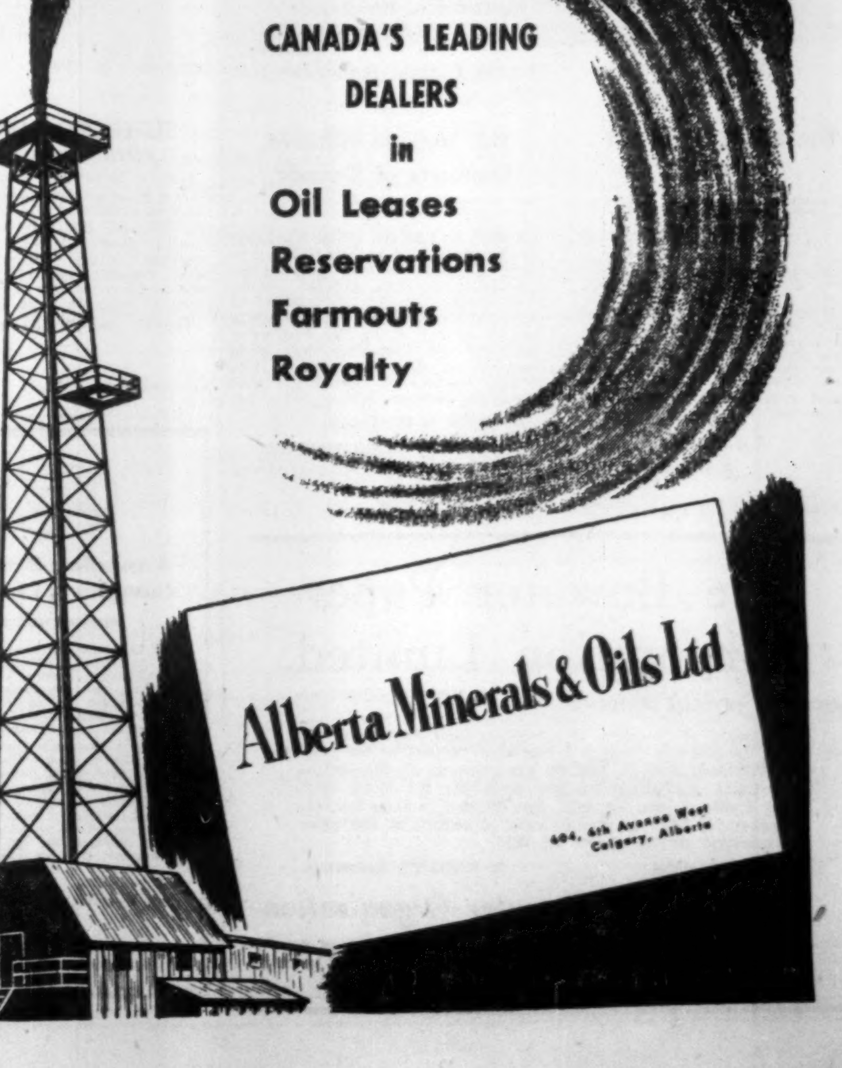
200 BAY STREET TORONTO, CANADA
Telephone: Empire 8-4781
Branch Office: 75 BROOK ST. — KINGSTON, ONTARIO



DIVIDEND NOTICES

THE CANADIAN BANK OF COMMERCE

DIVIDEND No. 279

NOTICE is hereby given that a dividend at the rate of thirty-five cents per fully-paid share on the outstanding Capital Stock of this Bank has been declared for the quarter ending October 31, 1956, payable at the Bank and its branches on November 1, 1956, to shareholders of record at the close of business on September 29, 1956.

By Order of the Board.

N. J. McKINNON, General Manager

Toronto, August 30, 1956.

MINDUSTRIAL CORPORATION LIMITED

DIVIDEND NO. 3

Notice is hereby given that a quarterly dividend of 2½ cents per share on the issued Capital Stock of this Company has been declared payable October 1, 1956, to shareholders of record September 14, 1956.

By Order of the Board.

R. J. BEHAR, Secretary-Treasurer.

Toronto, Ontario, September 14, 1956.

DOMINION FABRICS LIMITED

DIVIDEND NOTICE

Notice is hereby given that a dividend of 37½c per share has been declared on the Second Cumulative Participating Preference shares; and a dividend of 10c per share on the Common shares of the Company, for the quarter ending October 31, 1956, payable November 1, 1956, to shareholders on record October 15, 1956.

By Order of the Board,

WILLIAM CAMELFORD, Secretary.

BRITISH COLUMBIA POWER CORPORATION, LIMITED

DIVIDEND No. 12

NOTICE IS HEREBY GIVEN that a dividend of thirty-five cents (35¢) per share on the outstanding Common Shares of the Company has been declared payable 15 October, 1956 to shareholders of record as at the close of business on 26 September 1956.

The transfer books of the Company will not be closed.

By Order of the Board.

G. G. WOODWARD, Secretary.

Vancouver, B.C. 6 September, 1956.

WOOD ALEXANDER LIMITED

Notice is hereby given that a regular quarterly dividend of 1½% per share has been declared on the 6% Cumulative Redeemable Sinking Fund Preference Shares, payable October 1st, 1956 to shareholders of record as at close of business September 14, 1956.

By order of the Board.

J. I. WHITFORD, Secretary-Treasurer.

DIVIDEND NOTICE

SWITSON INDUSTRIES LIMITED

Dividend No. 14

Notice is hereby given that the regular quarterly dividend of 7c. per share has been declared on the common shares of the Company to be payable on Saturday, September 29th to shareholders of record at the close of business on Wednesday, September 19th, 1956.

By order of the Board.

W. T. GUNNING, Secretary

Welland, Ontario, September 11, 1956.

N. SLATER COMPANY LIMITED

HAMILTON-CANADA

DIVIDEND NOTICE

NOTICE IS HEREBY GIVEN that a dividend of .53c per share has been declared on the outstanding Preferred Stock of the Company, payable October 15th, 1956, to shareholders of record at the close of business on September 28th, 1956.

NOTICE IS HEREBY GIVEN, ALSO, that a quarterly dividend of .20c per share has been declared on the outstanding Common Shares of the Company, payable November 1st, 1956, to shareholders of record at the close of business on October 11th, 1956.

By Order of the Board.

E. GARSIDE, Secretary.

THE EASTERN TRUST COMPANY

222nd consecutive DIVIDEND

Notice is hereby given that a quarterly dividend of 2½% (25c per share) has been declared on the paid-up Capital Stock of the Company (par value $10.00 per share), for the quarter ending September 30th, payable October 1st, 1956, to shareholders of record as at the close of business September 20th.

Dated at Halifax this 13th day of September.

By Order of the Board.

E. G. DEWLING, Secretary.

DIVIDEND NOTICES

The 111th consecutive quarterly GUARANTY TRUST Company of Canada DIVIDEND

17½¢ a share — rate of 7% per annum payable October 15, 1956 to shareholders of record September 28, 1956

J. WILSON BERRY
President and General Manager

Belding-Corticelli Limited

Notice of Preferred Stock Dividend No. 167

A dividend of one and three-quarters per cent (1¾%) has been declared on the Preferred Stock of this Company, for the three months ending September 30th, 1956.

The above dividend is payable on the 1st day of November, 1956, to shareholders of record at the close of business the 29th day of September, 1956.

By Order of the Board.

D. F. POLLOCK, Secretary-Treasurer.

Ash Temple Limited

Notice is hereby given that the following Dividends have been declared payable October 1st, 1956, to shareholders of record at the close of business on September 18th, 1956. Quarterly Dividend #24 of 1½% on the 6% Cumulative Redeemable Class A Preference Shares. Dividend #3 of sixteen and one-quarter cents (.16¼c) per share on the 6½% Cumulative Redeemable Sinking Fund Class B Preference Shares.

By Order of the Board.

E. M. FARNCOMB, Secretary-Treasurer.

Toronto, Ontario, September 11th, 1956.

DIVIDEND ANNOUNCEMENT

KELVINATOR OF CANADA LIMITED

The Directors of Kelvinator of Canada Limited at a meeting held today declared a quarterly dividend of fifteen cents per share for the final quarter year as compared to a quarterly dividend of twenty-five cents paid formerly.

In view of the substantial increase of volume during the year and of the continued highly competitive position of the appliance business, it is the opinion of the Directors that a greater portion of yearly earnings be retained for the operation of the business.

September 11, 1956.

HIRAM WALKER-GOODERHAM & WORTS, Limited

NOTICE OF DIVIDENDS

A quarterly dividend of 75 cents a share and an extra dividend of $1.00 a share has been declared on the outstanding no par value Common stock of this Company, payable Monday October 15, 1956, to shareholders of record at the close of business on Friday September 21, 1956.

By Order of the Board,

A. H. STUART, Secretary

Walkerville, Canada, September 7, 1956.

NOTICE OF DIVIDEND
John Labatt Limited

Notice is hereby given that Dividend No. 47 of thirty cents per share has been declared on the outstanding common shares without nominal or par value of the Company, payable on the First day of October, 1956, to shareholders of record at the close of business on the Seventeenth day of September, 1956.

By Order of the Board:

ALEX S. GRAYDON, Secretary.

London, Ontario, September 10th 1956.

The Sherwin-Williams Company of Canada, Limited

Notice is hereby given that the one hundred and eighty-first quarterly dividend of one and three-quarters per cent (1¾%), being at the rate of seven per cent (7%) per annum, for the quarter ending August 31st, 1956, on the Preferred Stock of the Company, has been declared payable October 1st, 1956, to shareholders of record the 10th day of September, 1956.

By Order of the Board.

P. W. HOLLINGWORTH, Secretary-Treasury

Montreal, Quebec. September 1st, 1956.

DIVIDEND NOTICES

DIVIDEND NOTICE

HENDERSHOT PAPER PRODUCTS, LIMITED

The Board of Directors of Hendershot Paper Products, Limited, at a meeting thereof held on September 11th, 1956, declared a dividend of $2.80 per share on the outstanding 6% Cumulative Redeemable Preference Shares of the Company, that represent the old 5% Cumulative Redeemable Preference Shares, and to the holders of the remaining 6% Cumulative Redeemable Preference Shares a dividend of 70c per share, both dividends payable October 1st, 1956, to shareholders of record as at the close of business on September 14th, 1956.

By Order of the Board,

E. M. McArdle, Secretary Treasurer.

DIVIDEND NOTICE

HENDERSHOT PAPER PRODUCTS, LIMITED

The Board of Directors of Hendershot Paper Products Limited, at a meeting thereof held on September 11th, 1956, declared the thirty-eighth quarterly dividend of 6¼c per share on the outstanding Common Shares of the Company, payable October 15th, 1956, to shareholders of record as at the close of business September 28th, 1956.

By Order of the Board.

E. M. McArdle, Secretary-Treasurer.

SUPERTEST PETROLEUM CORPORATION, LIMITED

NOTICE OF DIVIDEND

NOTICE is hereby given that a quarterly dividend of $1.25 per share upon the outstanding 5% cumulative redeemable sinking fund preference shares of the par value of $100 each in the capital stock of the Company has been declared payable on October 15th, 1956, to shareholders of record at the close of business September 21st, 1956, such dividend being at the rate of 5% per annum for the period from July 15th, 1956, to October 15th, 1956.

By Order of the Board.

C. C. COPEMAN, Secretary.

London, Ontario, September 10th, 1956.

McCOLL-FRONTENAC OIL COMPANY LIMITED

"PREFERRED STOCK DIVIDEND NO. 41"

NOTICE IS HEREBY GIVEN that a Dividend of $1.00 per share, being at the rate of 4 per cent per annum, has been declared on the 4% Cumulative Preferred Stock of McColl-Frontenac Oil Company Limited for the quarter ending September 29, 1956, payable October 20, 1956, to shareholders of record at the close of business on September 29, 1956.

By Order of the Board

FRED HUNT, F.C.I.S. Secretary.

UNITED KENO HILL MINES LIMITED

Notice is hereby given that an interim dividend of ten cents per share and an extra dividend of 5c per share has been declared payable in Canadian Funds on October 15th, 1956, to shareholders of record at the close of business on September 21, 1956.

By Order of the Board.

C. R. ELLIOTT, per I. C. Secretary-Treasurer.

Toronto, Ontario. September 14, 1956.

UNITED KENO HILL MINES LIMITED

United Keno Hill Mines Limited has announced the declaration of an interim dividend of ten cents per share and an extra dividend of 5c per share payable in Canadian Funds on October 15, 1956, to shareholders of record at the close of business on September 21, 1956.

It will be noted that the payment of the dividend is one month earlier than previous declarations. The Company advises that the date of declaration has been changed to conform with the normal dates of Directors' Meetings.

The above news release is authorized by

C. R. ELLIOTT, Secretary-Treasurer. per I. C.

Toronto, Ontario. September 14. 1956.

SUPERCRETE LIMITED

NOTICE OF DIVIDEND

Notice is hereby given that the Board of Directors declared a dividend of eight and one quarter cents ($ .08¼) per share on the Common Capital stock of the company in respect of which dividends have not been waived, payable October 1, 1956 to shareholders of record at the close of business Sept. 15, 1956.

Transfer books will not beclosed.

J. E. DUMAS, Secretary

September 11, 1956.

Canadian Bronze Company, Limited

DIVIDEND NOTICE

The Quarterly Dividend of 1¼% on the PREFERENCE STOCK of Canadian Bronze Company, Limited, has been declared payable the 1st day of November, 1956, to Shareholders of record as of the 10th day of October, 1956.

Also a Quarterly Dividend of Thirty-Seven and a Half Cents (37½c) per share, has been declared on the present outstanding COMMON STOCK of Canadian Bronze Company, Limited, for the three months ending October 31st, 1956. Payable the 1st day of November, 1956, to Shareholders of record as of the 10th day of October, 1956.

By Order of the Board,

W. C. PAQUETTE, Secretary.

Montreal, P.Q., September 5th, 1956.

The Bowater Paper Corporation Limited

NOTICE OF INTERIM DIVIDEND

The Board of Directors at a meeting held September 13, 1956, declared an interim dividend in respect of the year ending December 31, 1956, of 4½ per cent on the Ordinary Stock equivalent to 12½ cents per £1 stock unit. The dividend will be paid, less British income tax, on October 29, 1956, to stockholders of record at the close of business on September 15, 1956.

London, England. R. KNIGHT, Secretary.

The Bowater Organization

Canada Great Britain United States of America Australia South Africa Republic of Ireland Norway Sweden

Market Bid and Ask Quotations

Montreal & Toronto

Closing Quotations Sept. 18, 1956

	Bid	Ask
xAbbican	50	53
Abitibi	35½	36
Do pr	23½	23¾
Acad-Atl	9½	9¾
Do A	21	21½
Do pr	..	99
xAc Uran	12½	14
xAcme G	19½	20
Admiral	17	17½
xAdvcte	..	460
Agnew-S	7½	7½
Do pr	9	9½
xAjax	95	98
xAktcho	47	52
xAl Expl	22	23
xAlta Dis	160	165
Do vt	140	145
xAP Con	40	52
Algom	17	17½
Do deb	91	92½
Do wts	850	875
Algoma	114	114½
Alumin	131½	132½
Do 1 pr	22	22½
Do 2 pr	..	47½
xAm-Lar	18	21
xAm Led	97	98
xAm Nep	205	215
xAmurex	685	700
xAnacon	258	259
xAnchor	16½	17½
Ang-A Ex	14½	14½
An C P pr	51½	53
An-C Tel	41	42½
Ang Hur	12½	12¾
xAn Ryn	130	132
Anth Imp	25¾	26
xApex R	14	15
xArcadia	283	285
xArcan	40	43
xArea	36½	39
Argus	18¾	19½
Do 2.40p	53½	53½
Do 2.50p	41¾	42¾
Arjon	18	19
xAscot	16	18
Ashdn A	13½	13½
Do B	12½	13
xAsh Tpl	350	395
Do A	96	..
Do B	9½	10½
Atlan Acc	6	6½
Do pr	15½	18
Atl Steel	29½	30
xAtl Yk	16	17
xAtl-Ruf	16	17
xAubelle	10	11½
xAumacho	35	37
xAumaque	14	14½
xAunor	205	210
Auto Elec	14	14½
Do A	10	..
Auto Fab A	5	6
Do B	100	200
xAvlbna	9½	10
xBagamac	8	9
Bly Sel A	18¾	19
Do pr	37½	38
xBanff	310	345
xBankeno	32	32½
xBankfld	10	10½
Bnk Mont	53½	54½
Bank NS	58½	59
Bk Cdnne	40½	44
Barb-Ellis	42	..
Barcelona	4	9
xBarnat	50	59
xBarvue	76	85
xBarymin	260	265
xBase Met	79	80
xBaska	23	23½
xBata	13	14
Ba Innes	9	9½
B Pow A	63½	63
Do B	40½	44
xB-Duq	230	235
Beatty	7	7½
xBeaucge	300	305
xB Lodge	38	40
B Lumber	19	19½
Do A	21½	..
Do pr	..	32
xBelcher	225	230
B Phone	46½	46¾
xBeltrre	206	215
xBethlm	280	290
xBevcon	31	33
Bibis	9½	10½
xBicroft	252	259
Do wts	100	105
xBidcop	66	68
Biltmore	6¾	7½
Do pr	13½	13
xBlk Bay	66	74
Blue Rib	11	13
Do pr	36	40
xBonville	11	11½
xBordulac	12	13
xBouscad	13	16
xBouzan	194	195
Bowtr pr	..	46½
Bowes	20	..
xBoymar	8½	9
xBralorne	500	525
xBrslmn	103	110
Br Cd A	17½	18½
Do B	10	10¾
Brazil	7	7½
Do pr	88	115
Br Tk pr	46	47½
Do wts	350	..
Bright	14	15½
Do pr	20	20
xBrilund	104	105
xBritalta	310	315
BA Oil	45¾	46
BCE 4 p p	83	88
Do 4½ pp	44	45
Do 4½ pp	..	46½
Do 4¾ pp	..	96½
Do 5 pp	50½	51
BC Forest	13½	13¾
BC Pk A	..	13½
Do B	12	13¾
BC Pow	45¾	46
BC Phone	48¾	49
xBr Reef	134	135
Bruck A	8	8½
Do B	300	325
xBrunhurst	9	9½
xBrnsman	10½	11½
xBrunston	13	14
Brunswick	11½	11¾
xBufadsn	11½	12
xBuf Ank	70	75
xBuf Cdn	14½	16
xBuff RL	8½	9
Build Pro	36	37
Bullochs A	..	7½
Do B	400	550
xBkr Hill	14	14½
xBurchell	36	38
Burlington	29	30
Burns	12¾	13
Burrard A	7½	8
xCal Pete	137	140
Cldwl 1 pr	21½	24½
Do 2 pr	..	13
Cal Ed	29	29½
Cal Pow	..	64
Do 5 pp	105	110
xCal Con	500	520
C Chib	19	19½

	Bid	Ask
xCmp RL	560	585
xC Bread	300	325
Do B	50	30
Can Cem	31½	32
Do pr	28¾	29
CCC Stone	7	7½
Can Foils	10½	13½
Do A	..	14½
C Fdry A	28	30
Do Com	..	15
CI Fndry	36	36½
CI F 4½	105	106
Can Life	150	156
Can Mach	10	10½
Can Malt	58½	59
Do pr	23½	23½
xC O Lds	300	305
Do wts	170	185
C Pk A	40	40½
Do B	37½	38
Can Perm	88	90½
C S 4 pp	..	97
xCS O wt	110	120
xCS Pete	510	530
CSL	28½	29
Do pr	12	12½
C Wire A	180	..
Do B n	18	18¾
xC Ad Oil	52	55
xCdn Ast	32	34
xC At Oil	700	710
Cdn Baks	..	6
C B Com	53¾	..
Cdn Brew	26½	26¾
Do pr	27	27½
xC B Emp	58	62
Cdn Can	40¾	40¾
Do dep r	39½	..
Cdn Celan	13¾	14
Do $1 pr	15¾	18
Do 1.75pr	29	29½
C Ch Cell	8¾	9½
C Coll'ries	..	8½
Do pr	88½	90
Cdn Con	450	450
Do B	400	400
xC Dec wt	64	69
xC D Pet	675	680
C Dredge	20½	20¾
xC Ex G	605	620
C Fairbks	..	27
Do pr	125	..
xCF Prod	325	330
Do A	8	8½
Do pr	52½	55
CGE	800	995
Do se A	22½	22½
Do se B	25	29
xC Hmtd	225	229
C Hy Car	9½	10½
C I Mach	6	7½
Do A	10¾	11½
Cdn Loco	28½	32
xC Malart	39	41
Cdn Oil	26½	27
Do pr	160	161
Do 5 pc	..	102½
Do 4 pc	..	94
Do '53wt	11½	11¾
Do '55wt	5½	6
CPR	33¾	33¾
Cdn Pet p	28¾	29
xC PL P	3.80	3.85
xC Pros	5.00	5.25
Cdn Salt	20	21
Cdn Tire	126	135
Do pr	20½	..
C Util pr	98½	98½
Do 4½p p	82	85¾
C Vickers	31½	32
C Wall A	14	15
Do B	14½	15
CWN G pr	16½	17
xC Wlstn	325	330
xCandusa	160	162
xCanam	..	110
xCan-Er	101	104
xCan-Met	166	173
Do wts	75	80
xCan Nat	178	180
xCan Oil	280	290
xCariboo	70	74
xCassiar	835	850
xCastle	395	400
C Can Inv	30	..
Do pr	100¾	..
xC Expl	380	400
xC Leduc	480	485
xC Pat	..	120
xC Porc	13½	14
xCntrmaq	15	15½
xCh Oil	203	210
Ch Trust	55½	56
Chatco	12	12½
Do pr	6½	6½
Chat-Gai	15	15
xCh Res	440	445
xCheskirk	10½	11
xChstvlle	34	35
xCh Jac	485	490
xCh-Kay	55	57
xCh M	..375	390
xCh Expl	85	88
xChimo	100	101
xChrom	305	320
Chrysler	71½	72½
xCirc Bar	200	300
Do A	475	490
xCobalt	65	69
xC Will	83	95
Coch-D	17	18½
Do A	16¾	19½
Cockshutt	6½	6¾
xC-Reco	78	80
Cghln C L	16	16½
xC Lake	13	15
xCldstrm	142	143
Cellwood	12	..
Do pr	12	..
xColomac	11½	13
Comb Ent	10½	11½
xComoil	375	425
xC Pete	495	520
Conduits	10½	11
Conf Life	125	152
xConigas	235	245
xConrum	46	48
xConro	25	26
xC Alenbe	15	17
Con Baks	7	7¾
xC Blkno	51	53
xC Beta G	25	28
xC C Cad	16	17
xC Crdsn	28	29
C Dnson	9.60	9.75
Do wts	360	365
xC Disc	330	335
xC Drgn	67	68
xC E Crst	60	70
xC Fnmr	155	160
Do B wt	35	37
Con Fire	7	10
C L Call	35	36
xCon Gill	11	12
xCG Arr	22	25
xC Guyna	32	35
xC Halwl	181	182
xC Hwey	395	405
xC Mrbnr	35	37
xC M M	520	525
Con M&S	30¾	30½
xC Morrsn	30	32
xC Moshr	70	75

	Bid	Ask
xC Negus	22	24
xC Nichol	12	13
xC Nthlnd	91	97
xC Peak	12	13½
xC Persh	19	20
xC Pr A	235	250
Do B	100	150
xC Que	55	75
xC R Pop	26	27
xC Rgcrt	111	112
xC Sanrm	14	15
xC Sud	415	420
Con Tex	400	450
xC Thor	31	32
xC Tung	45	49
C W Pete	10	11
Con Gas	25¾	26
Con Glass	30½	31½
xConwest	640	685
C Clark	475	475
xC Cliff	400	405
xC Corp	140	150
xCoppcrst	62	64
xCop-Man	17	18
Corby vt	15¾	16
Do B	15½	16½
Cosmos	12¾	13½
xCoulee	104	108
xCournor	17	19
xCowchn	150	154
Craig Bit	7½	8
xCree O	580	590
xCrestaur	10½	11½
Cr Brook	5	5
Do pr	49	49
Do wts	120	125
xCroinor	29	30
Crn Cork	48	..
Cr Trust	23½	24
Crn Zell	54½	55½
xCrowpat	29½	32
Crow's N	210	..
xCusco	17½	20
xD'Argon	60	63
Davis A	10	10½
Do B	325	350
xDe Cour	44	45
Do wts	15	16
xD Horn	41	45
xD'Eldona	18	19¾
xDelnite	66	73
xDel Rio	365	370
xDesmont	23	26
xDetta	13	14
xDev-Led	151	159
Dist Seag	33	33½
xD Expl	760	810
Dome	13½	13½
Dom Ang	425	..
Do pr	95	..
xD Asbsts	15½	16
D Coal pr	8½	10½
D Cor C	13½	..
D Dairies	7¾	..
Do pr	16	19
xDiadem	37	38
Dom Elect	13	13½
Dom Fab	10½	10½
Do 2 pr	..	24
D Fndry	31	31¾
Do pr	99¾	100½
Dom Ins	210	..
D Magnes	17.	18
Dom Scot	30	30½
Do pr	47	49
D St ord	21	21½
D Stores	37	38½
Dom Tar	14¾	14¾
Do pr	21¾	23
Dom Text	7½	7¾
Do pr	137	142
xD Wool	100	125
xDonalda	44	45
D Ropes B	14	14
xD & M	120	130
Dnhue Br	30	31½
Dow Brew	35	35¾
xDuvan	57	58
xDuvex	30	30½
xDyno	107	109
xE Amphi	9	10
E Kooteny	6½	7½
xE Mlart	160	162
xE Sull	565	570
xE Asb	72	80
xE Metals	55	57
xE Ming	580	585
E Steel	5	5½
Easy Wash	14	15½
Do pr	15½	18
Econ Inv	38	40
Eddy	54¾	56
xElder	42½	50
xEldrich	55	60
xElcta (C)	98	..
Electrolux	12¾	12¾
xEl P-Rey	50	51
xEl Sol	27	28
xEM Glcr	17	19½
Emp Life	80	81
Equit Life	49	49
Erie A	6¾	..
Do B	275	..
Estabks pr	19½	22
xEureka	1.25	1.30
xExcelsior	90	93
xExpl A	1.11	1.12
Falcnbdge	39¾	39¾
Fam Play	17½	18
Fanny F	20	20½
xFara	1.25	1.28
Do wts	50	55
xFargo	2.75	2.85
xF'w Tung	28½	30
Fed Fire	53	..
Fed Gr	30	31
Do pr	27½	28¾
xFed Kirk	41	44
xFibre	400	400
Do pr	350	650
Fittings	675	700
Do A	10½	12
Flash F pr	15	..
xFlt Mfg	105	115
Ford	58½	58¾
Do A	124	124½
Do B	..	127
Foundat'n	22½	22½
xFranceur	20	21
Fraser	37	38½
Fremn pr	92	95
xFrobish	390	400
Do debs	81	83
xGaitwin	30	32
Gatineau	29½	29¾
Do 5 pp	99¾	102
Do 5½pp	104¾	110
Geco Min	18	18½
Gen Bake	5½	5½
G Dynam	73½	74
Gen Elect	..	65
GMC	45¾	46
xG Pete	550	575
Do A	550	600
GP Mfg A	..	37
Do B	42	..
GS Wares	8½	9
Do pr	..	90
xGenex	35	39
xG Scien	161	190
xGt YK	555	565
xGl Uran	85	86
xGoldcrst	13½	14
xGoldale	24	25
xG Eagle	9	9½
xGold M	250	255
xGF Uran	28	30
Goodyear	150	..
Do pr	48¾	49
G Mac A	7½	8
Do B	7½	8½
Grafton A	11½	15½
xG Bousq	19½	20
Granby	12½	13½
Gr Toy	35½	49
xGrndnes	30	31
xGrandoro	62	74
xGranduc	..	570
GL Paper	43¾	44½
GN Gas	6½	6¾
Do pr	41	44¾
Do wts	325	350
Gr Pl Dev	43	44
xGr S G	310	315
GW Coal A	9½	9¾
Do B	8½	8½
Gr West	..	20½
Greening	450	500
xGreyhwk	46	38
Gridoil	..	11½
Guar Tr	21	21½
xGulch	34	37
xG Lead	13½	14
Gunnar	18¾	19½
Do wts	9½	9¾
xGurney	300	400
Do pr	..	22
xGwillim	15	16
Gypsm n	37	37½
Hahn	21	22
Do A	15	16½
xHallnor	325	350
H Cotton	15	16
Do pr	98	100
H Carpet	7	7½
xHard R	13	14
xHar-Min	38½	39
Hartz A	8½	10
xHasaga	14	15
xH of Lks	12½	14
xHedwy	105	107
xHeath	23½	24
xHees	350	350
Hndsht n	6½	6½
Do pr	97	98
Do rts	..	30
xHeva	9	9½
xH Crest	38	40
xH-Bell	82	85
xHighwod	38	39
H Dauch	45	47
Hi-Towr	10	10½
xHolden A	..	300
Do B	..	160
Hollinger	25	25¾
H Oil A	13¾	14
Do B	13½	13¾
H Smith	..	44½
Do pr	44	47
xHoyle	785	800
Hud Bay	84½	85
xH-Pam	45	46
Hghs O A	..	16
Hghs O B	12½	..
Do pr	25½	..
Hur Erie	34¾	36
xHusky	13	13½
Do wts	675	700
Imp Bank	58	60
Imp Fl-Gl	24	26½
Do pr	..	27½
Imp Inv	..	10½
Imp Life	56	60
Imp Oil	59½	59½
Imp Tob	11½	11¾
Do pr	6½	6½
xInd Lake	23	24
Ind Accep	27½	28½

	Bid	Ask
Do 4.50p	..	96
Do 2.25p	..	47
Ingersoll A	7½	7½
Inglis	8	8½
Ing & B p	11	11½
Inlnd C pr	17¾	18
xInsprtn	125	128
Int Bron	12	15½
Do pr	24	24½
I Met A	42	42½
Do pr	95¾	99
Int. Nick	103½	103½
Do pr	127	128
Do 5 pr	6½	6½
Int Pete	35½	35½
Int Pow	270	275
xInt Rwk	62	65
Int Util	49½	51
Intprv BC	14½	14½
Do A w	135	250
Do B w	100	200
Intprv PL	43½	44
xIrish C	260	270
xIron B	245	260
xIsotope	160	170
xJ Waite	20½	21
xJacobus	27	30
Jam Pub	24	25½
Jam P.S.	104½	..
xJ Expl	78	85
xJeanette	51	53
xJellicoe	21	23
xJoburke	14	16
Johns-M	51½	51¾
xJoliet	100	102
xJonsmfth	20½	23
Journ Ott	16½	18
xJowsey	99	100
xJupiter	205	214
Kelvinator	10¾	11
xKenville	9	9½
Kerr Add	17¾	18
xK Lake	50	68
xKyByCon	9	10
xKeymet	55	64
xKilembe	355	360
xDo wts	150	151
xK Hud	64	67
xK Min	180	185
xK Town	20	22
xKroy O	215	218
Labatt	21	22
Labrador	19½	20
xL Cinch	70	75
xL Duflt	220	230
xL Ling	15	16
xL Osu	18	20
xL Shore	405	425
xL Wasa	23	28
L Wods pr	..	140
xLa Luz	405	410
xLamaq	290	300
Laura Sec	18¾	19½
Laurent A	10	11
Do wts	60	100
L and J A	20½	21½
Do B	21½	..
xLeitch	85	90
Lewis Bro	9½	10
xLencourt	14½	15
xLexindin	18	20
xLib Pete	250	259
xLL Lac	186	190
Loblaw A	48	48½
Do B	77	81½
Do A pr	28½	29
Do n A	..	18¾
Do B	18¾	19½
Do pr	42	42½
Loews	121	150
xLomega	15½	16
xLon Hos	105	175
Do A	6	6½
xLI Pete	15	16
xLorado	105	110
xLouvicrt	21	25
L St. Law	20	..
Lowney	22	24
xLndhrst	148	150
xLynx	9½	11
xMacasst	190	195
xMacdnld	70	75
xMacfie	13	14
xMackeno	48	49
MacK Str	43	44
Do pr	100	..
xMacLd	130	131
MacMil A	37½	..
Do B	37	37½
xMadsen	230	233
xMages	125	135
xMagnet	11	12
Mlmn cum	27¾	..
xMalartic	140	145
xManest U	21	23
M sug pr	..	102
M Lf Gard	20	21
M Lf Mill	8¾	8¾
Do pr	90	99
xMaralgo	27	32
xMarcon	16	18
xMarcus	9	9½
xMarigold	33	33½
xMartime	266	268
Do B wt	64	65
Martin	12	12½
Mass-Har	7	7½
Do pr	89	89
xMatatch	60	110
Maxwell	6½	6¾
xMaybrn	103	104
McBrn pr	10¾	11
McCabe A	17½	..
Do B	18	..
McColl	62¾	..
Do pr	97½	98
McIntyre	83½	84
McKenz	32½	35
xMcMrmc	12	15
xMcWters	35	37
xMentor n	56	60
xM Chip	9	10
xMerrill	255	260
Merr Pete	16½	16¾
xMeta Ur	25	25½
Mex LP	15	15¾
Do pr	11½	11¾
Mex Tram	8	14
xMidcon	122	124
Mid Pac	19½	27½
xMidrim	157	158
xM-West	425	430
Do wts	160	225
xMill City	30	31
xMilliken	138	139
xMilt Brk	400	415
xMindmar	20	21
Ming Corp	25	25½
xMin End	50	51
Min-Ore	24	25
Mtchl & C	34½	..
Mod Cont	11½	12
Do A	13½	14
xMogul	300	305
Molson A	23½	24
Do B	23	24
xM Knit	450	500
Do pr	44	50
Mon Mort	45	46
xMoneta	66	70
Mont Loco	15½	16
Moore	53	53½
Mrgn & C	..	21½
Do 4½pr	100½	101
Multi-M	120	125
xN Creek	103	105
Nat Drug	11½	11¾
Do pr	11½	11½
xNat Expl	51	54
Nat Groc	20	22
Do pr	26½	26¾
N Hos A	450	475
Do B	475	500
Nat Lead	104¾	105¾
xNat Pet	465	470
N St Car	28	28¾
Nat Trust	40½	44½
xNello	22	30
xN Lab	1.23	1.25
xN Alger	15	17
xN Athna	74	75
xNew Bid	14	15
xN Brist	1.10	1.16
xN B D	2.28	2.40
xNew Cal	65	66
xN Ch'n	2.38	2.40
xN Concd	35	40
xN Cont	77	79
xN Davies	23	26
xN Delhi	73	75
xN Dick	1.55	1.56
xN Frtne	28	30
xN G E	1.60	1.65
xN Gldvue	20	21
xN Harr	21	22
xN Hghrg	60	61
xN Hosco	25	27
xN Jason	18½	20
xN Kelore	18	21
xNewlund	39	40
xN Man	1.19	1.20
xN Minda	41	42
xN Mylma	14½	15
xNewnrth	13½	14
N Roun	15	17
xN Royn	400	405
xN Senator	8½	9
xN Super	232	245
xN Taku	24	25
xN Thurb	13	15
xN Rim	395	400
xNip'sng	350	360
xNisto	14	14½
xNor-Ac	65	70
Noranda	61	61½
xNordon	17½	25
xNorgold	17	18
xNorlartic	14	15
xNormtal	675	690
xNorpax	181	182
xNrthcal	125	135
xNC Oils	655	670
Do wts	310	320
Do pr	37	38
xNor Inca	7½	8
xN Rnkn	136	137
xNthspn	405	410
N Star	14½	14¾
Do wts	6½	6½
Do pr	44½	44¾
Do w'56	225	300
xN Can	116	120
NQ Pow	31	32
Do 1 pr	48	50½
NW Util p	81½	82¾
xNthlnd	88	90
xNorvalie	36	37
xNudulma	40	42
Oak Wood	6	7½
xObaska	9	9½
xO'Brien	68	80
Off Spec	16½	18½
xOgama	26½	27
xO Select	12½	13
xO Rare	76	82
xOkalta	285	290
xO'Leary	28	29

	Bid	Ask
xOmnitrans	8	9
xOB Sup	30	100
xOB Sup	450	700
xO Jock	240	245
Do pr	9¾	10
Do B pr	9½	9¾
Do wts	60	63
Ont Loan	27½	28
Ont Steel	26	27
Do pr	133½	..
Opemiska	14	14½
xOr Cr	320	335
xOrenada	32	34
xOrmsby	43	45
xOsisko	37	38
xPac Cle	140	165
xPac East	11	12
Pac Pete	17	17¾
Page-Hers	92	95
xPamour	51	59
xPan West	30	31
xParamaq	12	14
xParbec	11	11½
xPardee	70	75
Pkr Drill	6½	6½
xPater	80	85
xPthfndr	150	152
xPaymastr	26	28
xP River	10½	10¾
Pembina	43½	44
Do pr	..	48¾
Penmans	25	26
Do pr	119	120
PC Jewel	22½	25
Do pr	99½	100
xPerron	25	28
xPeruv O	188	200
Permo G	200	203
xPetrol	121	122
xPhillips	135	140
Photo Eng	44	46½
xPick Cr	130	134
xPioneer	170	178
xPitch-Ore	11	12
Placer	13	13½
xPonder	68	70
xPoplar O	25	38
Powell R	45½	45¾
xPow Ryn	50	60
Pow Corp	63	64
xPr Oil	435	440
xPrem Bd	15½	17
Prem Tr	90	90
xPres El	155	170
PRM Inc	32½	33¾
Do debs	91	91½
Do wts	125	150
xPreston	630	640
Price Bro	92	94
xPronto	500	510
Do wts	125	150
xPros Air	175	180
Provnicial	12½	13½
xProvo G	202	205
xPurdex	24	25
xQ Chib	204	205
xQ Cop	155	157
xQ Lab	15	16
Q Lith	10¾	11
xQ Man	85	95
x& Metal	285	295
Q Power	26½	27
xQuenstn	20	23
Quemont	24	24¾
Quinte A	10¾	12
Do com	5	..
xRadiore	108	109
xRnville	161	166
Rapid-Grip	8½	9½
xRayrock	150	154
xR Earth	180	185
xR Expl	14	15
xReeves	190	200
Regent	23½	24
xRenabie	230	240
xRexspar	40	42
xR Palm	202	203
Rlds A pr	..	98½
xR Rupni	17½	19
R Silk A	9½	10
Do B	225	400
xRix Atha	68	70
Robertson	13	14
Do $1 pr	..	18½
xRobin	325	475
Do pr	..	300
R Little	9½	9½
Do A	13½	14
xRoche	14	15
xRockwin	25	29
Rlnd P pr	85	91
xRwn Con	13½	14
xRoxana	11	13
Ryl Bnk	65	65½
Ryl Oak A	11	14½
Royalite	15¾	16½
Do pr	29½	30
Russell	11½	11½
xRyanor	15	18
St. L C A	17	17
St L Corp	73	73½
Do A pr	98½	99
xSt Michl	28	30
xSan Ant	75	80
xS River	21	21½
xSaphire	219	220
Do debs	88	90
Sar Bridge	15	15
xSask C	260	280
Scarfe A	11	11½
xScurr-R	350	365
Scythes	14¾	15
Do pr	20½	26½
xSec Fr	300	405
Shawin	85	86½
Do A	45¾	46
Do B	..	50½
xShawkey	15	16
xSheep C	135	137
xSherritt	840	845
Sher-Wms	40	41
Do pr	..	150
Shrf-Hors	10	10½
Sicks	24	24½
Do vt	..	24
xSigma	480	495
xSilanco	12	13
Silknit	18½	24
Do pr	37½	..
xSil Mill	110	117
xSil Stand	46	50
Silvwd A	11	11½
Do B	11½	12
Smn & Sn	11	..
Do 5 pr	..	9¾
Simpsons	22½	22½
xSiscoe	83	85
xSKD Mf	350	400
Slater nw	16	17
Do pr	43½	..
xSlocn VR	21	23

	Bid	Ask
Somrvle p	49½	51½
xSouris	26	28
Southam	49½	51½
xSau Am	850	900
Sou Can	52	53
xSou U O	56	58
xSpooner	38	39
xStadcna	29	30
St Brands	36¾	37¾
St Pav	40	41
St Radio	12	15
Stanl'gh	265	270
St Br A	7½	9
Do B	8	9
xStanwell	70	72
xStarratt	9½	10
Stedman	23	24
Steel Can	65¾	66½
xSteeloy	10	10½
St Rock	21½	21¾
Stnbrg pr	100½	101½
Ster Tr	46½	48
xStovl pr	400	500
Stuart Oil	16½	16½
xSturgeon	62	64
xSud Cont	16	17
xSullivan	445	460
S Propane	6½	7
Do pr	..	24½
Do wts	335	350
Supt Ord	19	19½
Supt Com	26	42
Supt pr	30½	42
xSurety o	105	112
xSurf Inlet	8	9½
Switson	6	6½
xSylvnte	116	118
Tamblyn	41½	41½
Do pr	35½	46
xTandem	10½	11
xTaurcnis	42	45
Taylor PC	9½	9¾
Do pr	10	11
xT-Hugh	180	184
xTemgmi	575	600
xT Calg'y	78	80
xT Lund	146	150
xTiara	17	19½
TT Tailors	10	12
xTombill	36	40
xTorbit	65	70
T-D Bnk	44¾	45
Tor Elev	21½	21½
T Gen Tr	34½	37
Tor Iron	20	20
Do A	19	20½
Tor Mort	112½	..
Tor Sav	36½	..
xTowgmc	16	20
T Fin A	46½	47
Do B	43	48
Do 4½ pc	..	98
Do 5 pc	47½	48
Do A rts	17½	..
Do B rts	18¾	..
Do wts	50	..
xTr Can	155	160
xTr-Emp	227	230
xTr Era	33	34
Trans-Mt	76¾	77½
Tr PPL	15½	15½
xTr Res	34	35½
xTr Pete	13	14
Triad Oil	10	10½
Tuckett	137	147
Trin Cop	34	39
Union Acc	5½	5½
Do 2 pr	8	8½
Un Gas	60½	61¾
xU Mining	22	23
xU Asbts	680	685
U Corp A	30	..
Do B	24¾	25½
xU Estella	16	18
U Fuel A	59½	60½
Do B	43½	43¾
xU Keno	630	650
xU Mont	20	21
xUn Oils	219	220
Un Steel	17	17½
xUpp Can	90	93
xVandum	350	380
xVandoo	23	24½
Ventures	40½	41½
Viau Ltd	66	70
Viceroy A	7	7
Do B	300	400
xVico	31	32
Vic G Tr	25½	26
xViolmac	190	195
V Dare pr	14	15
xVulcan	68	70
Wabasso	17½	..
xWainrgt	400	405
Waite Am	13¾	14½
Walk GW	70¾	71¾
Wat Equip	17½	18
xWeedon	50	54
Wellington	78	..
xWerner	40½	41
xW Msn p	..	25
xWespac	29½	32½
xW Malar	12	15
xW Mygil	133	135
Westeel	19¾	20
xW Ashly	12	14
W C Brew	30	31
xW Dclta	172	175
Do wts	42	45
W Groc A	38½	38½
Do pr	28	30
xW Lease	610	650
xW Naco	135	140
Do wts	25½	29
Weston A	20½	21
Do B	20½	21
Do pr	95	96
White 1 pr	..	44¾
White Pass	9¾	10½
xWillroy	277	280
Do wts	160	200
xWilrich	40	41
xWiltsey	15½	16
xWinchstr	10	11
xWindwrd	22	25
Wpg Cent	11½	12½
xWood A	335	335
GH Wd pr	98	98½
xW Comb	285	350
xWr. Har	170	175
xY Lead	32	35
xY Can'ck	16½	18
xYellorex	15	16½
xYk Bear	210	212
xY Knt A	160	200
Do B	53	70
xYukeno	10	11
Zellers	4½	48¾
xZenmac	32	33
xZulapa	45	50

Toronto Curb

	Bid	Ask
Andian	5½	6½
Ang C P	35	39
Ang-Nfld	10¾	11
Asbestos	39	39½
B A Bank	31½	35
Brown	18¾	18¾
xBulolo	470	480
CD Sug	22½	23
Can Ving	18¾	19
C Bronze	30	32
Do pr	102	..
C Cottons	..	8
Do pr	7	8
CG Inv	29¾	30
C Indust	18½	19
CIL pr	90	95
C Ing nw	48	49
xC Mrcni	430	445
CW Lumb	..	28
C Wstghse	42¾	43½
xC Cop	600	900
C Paper	38½	39
xDalhouse	21	22
DeHav	145	198
Dish St pr	24	..
D Bridge	20½	21
D Glass	42½	50

	Bid	Ask
Do pr	15½	..
D O Cloth	33½	34¾
Dupont	23	23¾
Do pr	..	92
Gaspe C	46	49
Hayes	32	34¾
Int Pap	115½	117½
Int Util	49½	50
IP Util	10½	11¾
Langly pr	35½	39
Lob Inc	66	70
MacLaren	85	90
MO Paper	33¾	34½
Niag Wire	52	52
Ogilvie	38½	39½
Do pr	148	165
xPato	470	475
xPend Or	385	390
Price Br	62½	63¾
Ridgeway	45½	45¾
Sangamo	12	13
xSW Pete	44	45
Third CG I	5½	6
Twin City	13½	..
Uni Pr nw	20¾	20½
xYuk Con	64	68
Zellers	25½	26

Canadian Stock Exchange

	Bid	Ask
Beaubran	29¾	30¾
Beldg Cort	7	..
Do pr	10	..
Belg'm St	9	11¾
Do pr	14½	18
Butly Ho	150	225
Can Fl B	..	18
Cdn Arena	96	..
C P & P	7½	8
C Silk A	300	375
Catelli A	25	27
Do B	38½	..
Cin 5½ pr	83	..
Cl Neon A	5½	8
Do B	6½	8
Do pr	72	76
C Div pr	37	..
Crain R.L.	20	..
D'd & F A	51	55
D Engr	23	24
For P Sec	50	55
Frmn 4½p	92	95
Horner A	10½	11
Htl L Slle	21	..
Hubb Flt	115	160
Do A	..	20
Hydro El	10	10½
Int Pnts A	7½	12
Do pr	..	23
Inv Found	43½	50
Do pr	59	60½
Lambt A	12	..
Do B	15½	..
Latonia I	18½	19¾
Lochber A	10	..
Do B	250	..
Lond Can	8	..
Macl P	85	86
Melch D	400	500
Do pr	11¾	12
Mica Co.	290	300
Mtl Refrig	36	..
Mt. R Rice	..	15
Nfld L&P	43½	45½
Paton Mfg	10½	..
Do pr 7	22½	..
Paul Ser St	6	..
Pw C 2nd	68	70½
Que-Tel	19	19½
Reitman's	15¾	17
Renld Ch	17¾	20½
Sangamo	12	12¾
Sou C pr	..	135
Stowell A	15	..
Toke Bros	65	110
Do pr	140	175
Un Am A	8	..
Do B	7	..
Do vt A	8	10
Un Dist	11	..
Waterman	8½	9½

	Bid	Ask
Wilson J.C.	7½	..
Wind Hot	38½	..
MINES		
Alta	10½	11
Amerum	17	17½
Arno	13	14
Band-Ore	13	14
Barvallee	..	17
Beatrice	13	14
Belechasse	70	80
Belle-Chib	34	35
Boreal R	18	20
Bouzan	195	..
Burnt H	190	195
Calumet U	11	12
Carnegie	29	29½
Cortez Ex	18½	19
Duvan	..	65
Est Smelt	..	610
Fab Mets	20	23
Fontana	13	14
Gui-Por U	10	10½
Hill Coll	70	..
Hud-Rand	36	37
Iso Ur	22	23
Kont Lead	15	17
Ling Cop	14	15
Mogador	78	80
Molybdte	110	120
Monpas	7½	8
New Form	59	60
N Lafy'te	37	40
N Pacific	160	175
N S'Tiago	13½	14
N Vinray	11	12
Nocana	10	..
Obalski	38	40
Orch Ur	17	..
Pitt	17½	18
Por. Prime	75	79
Q Smelt	100	108
Red Cr	27½	28
Soma-Duv	9	10
T Lake	50	52
Tazin	12	12½
Tiblemont	50	55
Trebor	37	38
Val Lith	23	25
Virg Min	225	230
Wendell	7½	8
Westville	29	30
OILS		
Altex	27	..
Bonn'lle	47	48
Calalta	135	145
Emp Oil	32	34
Gaspe	16	18
Gateway	8	..
Phillips	135	..
Quebec	9½	10
Westburne	98	100

DIVIDEND NOTICES

Commonwealth International Corporation Limited

Dividend No. 91

Notice is hereby given that a dividend of EIGHT CENTS per share has been declared on the outstanding Common Shares of the Capital Stock of the Company, payable on 15th October 1956, to shareholders of record at the close of business on 28th September 1956.

Holders of Bearer Share Warrants may present Coupon No. 91 for payment to any branch in Canada of The Royal Bank of Canada, on and after 15th October 1956.

By Order of the Board.

W. Lewis Alexander, Secretary-Treasurer

Montreal, 12th September 1956

LA LUZ MINES LIMITED

DIVIDEND NO. 17

NOTICE IS HEREBY GIVEN that a dividend of Five Cents (5c) per share has been declared by the Directors of La Luz Mines Limited, payable in Canadian funds on December 28, 1956, to shareholders of record December 7, 1956.

By Order of the Board,

A. G. FULTON, Secretary.

DOMINION GLASS COMPANY LIMITED

Notice is hereby given that a dividend of one and three-quarters per cent (1¾%) has been declared on the PREFERRED STOCK of the Company for the quarter ending the 30th day of September 1956.

Notice is also hereby given that a dividend of Thirty-Five Cents (35 cents) per share has been declared on the COMMON STOCK of the Company for the quarter ending the 30th day of September, 1956.

The above dividends will be paid on Monday, the 15th day of October 1956, to shareholders of record at the close of business Friday, the 28th day of September 1956.

By Order of the Board.

T. B. KING, Secretary.

Montreal, 29th August, 1956.

Grain Prices

Winnipeg Futures

Week to Sept. 17, 1956

Crop Year from Aug. 8, 1956 High	Low		High for week	Low for week	Close Sept. 17
		Oats—			
.83	.79½	Oct.	.82¾	.81¼	.82¾
.79½	.78	Dec.	.79½	.78¾	.79½
.79¾	.76½	May	.79¾	.78¾	.79½
		Barley—			
1.08¾	1.03¾	Oct.	1.08¾	1.06½	1.07¾
1.03¾	1.00½	Dec.	1.03¾	1.02¾	1.02¾
1.03¾	1.00½	May	1.03¾	1.02½	1.02¾
		Rye—			
1.36½	1.21¼	Oct.	1.34½	1.27¼	1.34½
1.36½	1.21½	Dec.	1.35½	1.28	1.35¾
1.41¼	1.25	May	1.41¼	1.32¾	1.41¼
		Flax—			
3.35	3.07¼	Oct.	3.30½	3.18	3.25
3.04½	2.80¾	Dec.	2.92½	2.83	2.90½
3.03½	2.80	May	2.93½	2.85	2.91¼

Chicago Futures

Week to Sept. 17, 1956

Crop Year from Aug. 8, 1956 High	Low		High for week	Low for week	Close Sept. 17
		Wheat—			
2.26¾	2.13¾	Sept.	2.26¾	2.22½	2.26
2.31½	2.18½	Dec.	2.31¼	2.27¾	2.30½
2.34¾	2.21¾	Mar.	2.34¾	2.31	2.33¾
2.33½	2.20	May	2.33½	2.30½	2.32½
2.31	2.12¼	July	2.27¼	2.24½	2.26½
		Corn—			
1.53½	1.42¾	Sept.	1.53½	1.46	1.53½
1.44	1.36¾	Dec.	1.39½	1.36¾	1.38½
1.48¾	1.40½	Mar.	1.43¾	1.40½	1.43¾
1.51¼	1.43¼	May	1.47¼	1.43½	1.46½
1.52¾	1.46¾	July	1.49½	1.48¾	1.48½
		Oats—			
.76½	.71¼	Sept.	.72¾	.71½	.72½
.78¾	.75	Dec.	.77¼	.76	.77
.79½	.76¾	Mar.	.79	.76	.76½
.79½	.76½	May	.79½	.73½	.76½
.77	.73½	July	.76¾	.75½	.76
		Rye—			
1.51½	1.33½	Sept.	1.51½	1.43½	1.51½
1.54½	1.37¾	Dec.	1.54½	1.46½	1.54½
1.58½	1.40½	Mar.	1.58½	1.50½	1.58½
1.59	1.41	May	1.59	1.50½	1.58½
		Soybeans—			
		Sept.	2.35½	2.29	2.35
		Nov.	2.38	2.31½	2.37½
		Jan.	2.41½	2.34¾	2.41½
		Mar.	2.44¾	2.38	2.44½
		May	2.47¾	2.41	2.47½

Winnipeg Cash

	For Week Sept. 17 High	Low	Prev. week High	Low
Oats—				
2 C. W.	.86¼	.84¾	.85¾	.84¼
3 C. W.	.80¾	.79½	.79½	.78¾
Barley—				
1 Feed	1.05¾	1.03¾	1.04	1.03
2 Feed	1.05¼	1.03¾	1.03	1.02
1 Malt	1.20½	1.19	1.18¾	1.16½
Rye—				
1 C. W.	1.33¾	1.29½	1.31¼	1.27¾
2 C. W.	1.33¾	1.29½	1.31¼	1.27¾

Chicago Cash

	For Week Sept. 17 High	Low	Prev. week High	Low
Corn—				
2 Yell.	...	...	...	...
Oats—				
1 H. W.	.75½	.72½	.76	.76

Municipal Bonds

Sept. 18, 1956

	Coup. %	Matur.	Bid $	Ask. $	Yld. $
Calgary	3½	'69	85½	88	4.75
Edmonton	3½	'69	85	87¾	4.75
Halifax	3½	'66	88½	90½	4.75
Hamilton	3	'67	85½	87½	4.50
Montreal	3	'70	79¼	81¼	4.85
Moose Jaw	3½	'60	93¾	95¼	4.70
Ottawa	3½	'68	88	90	4.40
Regina	3	'64	86¾	88¾	4.65
St. John, N.B.	3½	'65	89	91	4.75
Toronto	3	'68	84	86	4.50
Vancouver	3¾	'69	90	92	4.60
Victoria	3¾	'68	90½	92½	4.55
Windsor	2¾	'75	72¾	74¾	4.80
Windsor	3½	'75	81¾	83¾	4.80
Windsor	2½	'75	69¼	71¼	4.80
Winnipeg	3	'69	83¼	85¼	4.50

ATLAS STEELS LTD. has issued an additional 1,925 common shares to certain executive officers and employees, and an additional 2,120 shares upon conversion of 5% debentures. Now 859,470 common shares outstanding.

Household Finance Makes Staff Moves

Household Finance Corp. of Canada, head office Toronto, announces the following appointments and new office openings:

Executive appointment: V. F. Raymond, district supervisor, Eastern Division, headquarters, Montreal.

New office openings and managers: Riviere du Loup, Que., 358 Lafontaine St., J. E. Levesque; Toronto, 95 Danforth Ave., R. E. Boland.

Managers' transfers: C. A. Bussieres, to Montreal, 7064 St. Hubert St.; J. R. Charbonneau, to Montreal, 1231 Ste. Catherine St. West; Y. J. Desautels to Three Rivers, Que.; Y. J. Leblanc to Campbellton, N.B.; J. W. Nancekivell, to Lachine; F. H. Vallee to Quebec City, 487 Boulevard Charest E.

Managers' promotion: N. G. Holt, Leaside, Ont.; J. G. Lamoureux, Alma, Que.; L. A. Prud'homme, Levis, Que.

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OFFICES THROUGHOUT CANADA

Expand Nepheline Output 30% Jump Seen This Year

A jump of 30% in Canadian production of nepheline syenite this year is forecast by industry officials.

Output has been increased by:

—A rise to 15,000 tons a month from 12,000 tons at the Nephton, Ont. mill of **American Nepheline Ltd.**

—Opening of a new mine-mill by **International Minerals & Chemical (Canada) Corp.**

Production from American Nepheline's new $2.5 million mill, up 25% from the first of the year, is expected to be increased further as research turns up new uses for the product, officials say.

The white, non-metallic mineral is sold chiefly to the glass and ceramics industries. About 80% of production is sold in the U. S., with Canada taking 16% and Europe the remainder.

Nepheline syenite is mined by open pit methods on the company's property north of Peterborough. It is ground to various grades and its low iron content removed by magnetic separation. Surface drilling has indicated six million tons of ore in reserves on the 2,500-acre ridge where mining is carried on.

Research is developing new uses for the product. Latest success: it was found that it added strength when used in tile and sewer pipe.

This market would take a type of syenite made from tailings, now a waste product from the mill operation, according to A. L. A. Richardson, who replaced Thayer Lindsley this year as president.

Ventures Ltd., which financed American Nepheline in the early stages, controls the company.

The International Minerals mine, which began producing recently, is located in the same area.

Present production is running about 250 tons daily, N. B. Davis, general manager, reports. The mill is capable of expansion to around 600 tons daily capacity.

Most of International's output is marketed in the U. S.

Wholly owned by the **International Minerals & Chemical Corp.** of Chicago, it also operates a feldspar mine and grinding mill at Buckingham, Que.

Products in which nepheline syenite is used are glassware, TV tubes, lamp bulbs, window glass, dinnerware, vitrified china, bathtubs, basins, floor and wall tile, cleansers, scouring compounds and mineral wool. It is also used as a pigment extender in paints and as a filler for plastic, rubber and insecticides.

ANNOUNCEMENT

SUN OIL COMPANY APPOINTMENT

FRED G. CROSBY

W. T. Askew, President of Sun Oil Company Limited announces the appointment of Fred G. Crosby as General Sales Manager.

A native of Toronto, Mr. Crosby was formerly Assistant to the Managing Director. He began his career with Sun Oil Company Limited in 1931, and has held various sales posts in Ontario, Quebec and Nova Scotia.

In his new position, Mr. Crosby will direct sales and operations for the Marketing Division of the Company.

Columbium Pilot Plant Stage Near

Research on ore benefication and treatment of concentrates is moving the **Coulee-Headway** columbium property near Oka, Que., nearer the pilot plant stage, company officials announce.

Using a chemical process to get a 20.6% concentrate, columbium pentoxide of 99.9% purity was produced in laboratory work. The process has given a concentrate of up to 35%, officials say, but a lower grade may permit mining more of the ore.

The property, owned jointly by **Coulee Lead & Zinc Mines** and **Headway Red Lake Gold Mines,** is being developed by **Columbium Mining Products Ltd.,** in which Coulee-Headway have 90% interest and the original property owners 10%.

Reserves of ore are placed at 40 million tons grading an average of .3% columbium. Mining would be by open pit methods.

Coulee-Headway has previously been reported discussing participation in the Oka operations with large U. S. metal interests. The U. S. imports most of its columbium requirements from Africa.

Market Comment

What stocks and bonds are doing and what prominent observers say

Although continued sinking markets are starting to step up the tempo of selling slightly, liquidation pressure is still relatively light. But until investors feel they can predict the course of likely developments over the next few weeks with a little more certainty they will continue to stay out of the market.

Oils were the only group able to make headway at midweek and this reflected the improved marketing prospects for U. S. and Canadian oil that would grow out of any major interruption in Middle East oil shipments to Western Europe and North America. **Trans Mountain** oil pipeline, particularly, came back strongly following publication of current volume throughput figures which corrected a recent erroneous report contained in an investment letter. In the event of any major reshuffle in Middle East oil movements the big Trans Mountain line would not only operate at capacity but pipeline expansion programs would likely be speeded up.

• • •

JOHN C. L. ALLEN; John C. L. Allen Ltd. (Toronto)

Our government has done an excellent job of keeping our currency in such a high position among world currencies. Our strong currency reflects general prosperity and world recognition of Canadian developments.

In the forefront of these developments is the country's mining industry. In this regard I note that $1,500 million worth of uranium precipitates have been contracted for by our government. This is a remarkable feat of Canadian mining and certainly does a lot to make our economy such a good one.

But there is an important segment of the mining industry which is deserving of more consideration. About two years ago our government in answer to the cries of a socialistically inclined opposition party cut in half cost assistance to the country's gold mines. The amount the Government claims to have saved in this reduction of cost aid was approximately $4,500,000.

Since then the gold mining industry, which was the bulwark of the country's economy in depression years, has witnessed further large wage increases, continued exchange premium on our dollar and a great shortage of labor. The latter problem has been aggravated by the loss of skilled men to new mining ventures which are able to pay higher wages as a result of government contracts.

In the absence of any increase in the price of gold our government in its cost assistance program should give serious consideration to these problems and adjust cost aid to compensate for the upward revisions in wage schedules and the fluctuations in foreign exchange rates. The industry would thereby be in a stronger position to plan for the future, compete for labor and to increase production to the benefit of all concerned.

• • •

J. M. PECKHAM: Moss, Lawson & Co. (Toronto)

In our previous comments here we suggested that investors, after weighing all factors, political and economic, which govern the movements of stock prices, should concentrate on the most favored industries. Having mentioned nickel and natural gas as examples at that time, we should add that, while sharp price advances occurred in both groups in the meantime, only the latter's favorable developments have been discounted for some time ahead.

The indispensability and the prestige factor make the automobile a most desired commodity. Car sales, while off about 25% in the U. S., have improved 6% in Canada for the first seven months this year compared with the same period of 1955. Canadian automobile executives expect that 1956 will produce record sales and that this trend will continue well into 1957 not only because of the general prosperity and such well-known tendencies as the movement to suburbs and two-car households, but also because of the new emphasis on operating economies and radical model changes.

Ford Motor Co. of Canada, the only publicly traded automobile company, has reported earnings of $7.25 per share for the first six months this year as against $4.48 a year ago. Earnings for the full year are expected to at least equal 1955 results of $12.50 per share. However, at the current price of $124, the stock is still substantially below its high of $159 in September, 1955. Also the finance companies, such as **Traders Finance**, will continue to benefit from the performance of the automobile industry.

• • •

MAURICE FORGET; Forget & Forget (Montreal)

Two chief factors seem to interfere with the market whose main tendency seems to be upward.

These factors are the Suez Canal imbroglio and credit restrictions which are still severe.

The latest developments around Suez have improved in the last few days, and it seems that even if the final settlement is quite a few weeks away, Western allies will not resort to open warfare.

Credit restrictions may ease off in the next few months, or that is, as soon as the purpose for the imposing of these restrictions has been attained.

Meantime, we believe that careful and selected purchases of stock, at actual levels, should prove beneficial.

Economists, on the whole, sound optimistic as to the main trend of business for 1957, and those prophecies seem quite a bit justified.

To sum it up, for the moment, we think that careful, selected buying is in order.

• • •

ARTHUR WIESENBERGER & CO. (New York)

Those who have been banking on a reversal of policy by the money managers have received their answer. The tight money situation continues, as evidenced by still rising money rates and still declining bond prices.

The monetary authorities may be expected to ease the situation enough to take care of the normal seasonal loan demand, but by now it is amply evident that no reversal of policy may be expected unless and until loan demands abate. Meantime, the implications continue unfavorable for the bond market and stock market.

Active business, satisfactory earnings and liberal dividends have long since lost their bullish significance. These are associated with high and dangerous, rather than low and safe markets.

Investors are advised to utilize periods of strength in the general market and individual issues to build up buying power and be in a position to take advantage of later buying opportunities. New purchases should be confined to defensive type issues or "very special" situations.

Reasons for building up a 25% to 50% liquid position were outlined in detail in a recent 4-page letter to clients and subscribers. No matter what the outcome of the Suez affair, no matter how the presidential campaign develops, no matter what the election results, risks of materially lower stock prices outweigh the possibility of a rising or stable market and justify a continuing cautious investment attitude and policy.

Norpax Plans Drifting To Holes 38, 39

Drifting toward holes No. 38 and 39, about 200 ft. below the present level, is planned by **Norpax Oils & Mines Ltd.**

Norpax has already completed 200 ft. of drifting on the B zone at the Werner Lake area property where soft gouge material of high nickel grade was found. Mineralized zone covers a width of about 20 ft. The massive mineralization did not show up in original drilling.

Thirty holes were drilled on the B zone of which two were blank. Maximum depth reached was 550 ft. The zone, about 2,700 ft. long, is still open at both ends, officials say.

Trans-Can. Explor. Net Income $36,000 From Oil Output

Net income from oil-producing properties is running at a rate of $36,000 a month, S. B. Roman, president of **Trans-Canada Explorations Ltd.**, says in the company's annual report covering operations from inception to March 31, 1956.

Trans-Canada now has five wholly owned oil wells and a 50% interest in eight others. Reserves are placed at 1.6 million bbls. but the company believes that water injection, scheduled for the areas where Trans-Canada wells are located, will result in recovery of 3.4 million bbls.

Trans-Canada was organized Jan. 26, 1955, taking over the assets and liabilities of **Trans-Canada Petroleums Ltd.** and **Tecumseh Developments Ltd.** At that time, oil holdings consisted of 50% interest in four wells in the Pembina field, 50% interest in four wells in Leduc and one wholly owned well in Stettler. Expansion since then has been in the Pembina field.

The company is also participating in exploration of a group of nickel-copper claims in the Shebandowan area. A geophysical survey is planned, to be followed by drilling if warranted.

No Merger Plan For Chib. Jac. With Cpr. Rand

There is no intention to merge or amalgamate **Chibougamau Jaculet Mines** with the new **Copper Rand Chibougamau Mines** shareholders of **New Royran** and **Copper Cliff** were told this week.

Shareholders of the two Chibougamau mining camp properties approved merger of New Royran and Copper Cliff in Copper Rand. New Royran shareholders will receive 21 Copper Rand shares for every 40 New Royran and Copper Cliff holders get one Copper Rand for every two Copper Cliff shares (FP, Sept. 8).

Peter N. Pitcher, formerly general manager of **Giant Yellowknife Mines,** is to be general manager of Copper Rand.

What did . . .

"Stock Market News & Comment"

say about

NORPAX? ARCADIA NICKEL? HARVEST PETROLEUM?

EXTRACT FROM MARKET LETTER No. 750 (Feb. 16, 1956)

"NORPAX has pulled another good drill hole which lengthens its ore zone to 1600 ft., indicating $15,000,000 of ore to the 500 ft. level. Shaft sinking to initial objective of 350 ft. is in progress and in conjunction with lateral work on the 300 level, drilling will investigate the area down to 1,000 ft. in an effort to double indicated reserves. Hold and buy for a move through the $1.00 mark."

EXTRACT FROM MARKET LETTER No. 763 (May 17, 1956)

"Drifting in the nickel-copper ore zone indicated by drilling at NORPAX should be underway about mid-June and with surface drilling to be resumed immediately, the stock is **recommended in the $1.00-$1.10 range for a substantial rise.**"

EXTRACT FROM MARKET LETTER No. 777 (Aug. 30, 1956)

NORPAX, a steady performer these last weeks, has moved up to $1.51 on the report that drifting in massive nickel is proceeding. No assay results are as yet available but its current action indicates that the move to $2.00, previously predicted by this Letter, is on."

EXTRACT FROM MARKET LETTER No. 767 (June 14,1956)

"For those interested in a cheap oil stock (30c unlisted) I **recommend purchase of HARVEST PETROLEUMS LTD.** Recently made into a public company, with only 750,000 shares issued out of 5,000,000, it has a license covering 15,000 off shore acres in Lake Erie adjoining CONSOLIDATED WEST PETE. I expect to have further details on this later."

EXTRACT FROM MARKET LETTER No. 770 (July 5, 1956)

"I note that HARVEST PETROLEUMS has more than doubled from the price recommended in this Letter on June 14th. Survey of two Lake Erie acreage blocks is to be started almost immediately while a third block has been taken into SUBMARINE PETE., in which HARVEST will retain a one-third interest. Upon qualification of the shares, an underwriting on additional treasury stock will be effected. **Hold and buy on any reaction.**"

EXTRACT FROM MARKET LETTER No. 775 (Aug. 16, 1956)

"Among the junior nickel stocks, ARCADIA NICKEL (recommended in Letter No. 764, May 24/56 at $1.85) has moved up to $2.90 and if you missed this one, it's not too late. Go in and buy it for a move to $3.50-$4.00."

High following recommendation of NORPAX ..... $1.83!
High following recommendation of HARVEST PETE . .75!
High following recommendation of ARCADIA NICKEL 3.25!

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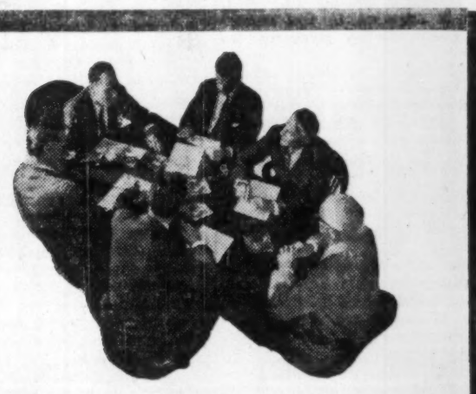
BANK OF NOVA SCOTIA—at Aug. 31, 208,743 shares, issued under rights offering to shareholders of record May 31, had been fully paid for. Now 1,708,743 shares outstanding.

WAINWRIGHT PRODUCERS & REFINERS LTD. during August issued an additional 213 shares against cancellation of debentures. At Aug. 31 there were 730,978 shares outstanding and 2,269,022 in treasury.

TORONTO-DOMINION BANK — 500 shares, issued under rights offering to shareholders of record May 11, have been fully paid for. Now 2 million shares outstanding.

HUSKY OIL & REFINING LTD. has issued an additional 40 common shares under its incentive share option plan for employees. Now 1,968,992 common shares outstanding.



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Taking Stock

What's going on in the mining and oil markets — the facts and rumors.

Western oil and gas issues probably show the biggest price increases of any major market group so far this year. Until they hit a mid-summer peak, oil and gas stocks climbed almost without interruption. Right now they are up some 40% from their lows at the beginning of the year as measured by the Toronto Stock Exchange index. Since hitting a high in August, prices have lost an average of about 10%.

With the Suez crisis threatening to upset Europe's oil supplies, Canadian oils appear to be in an excellent position, say analysts. More oil would flow into the U. S. from Canada as U. S. oil moves overseas. Also, gas interests of the Canadian companies are increasing in value as the Trans-Canada gas line progresses. Here are some of the swings in prices of oil and gas stocks:

	Latest Price	Aug. 31	Year Ago	1956 High	1956 Low
	$	$	$	$	$
Bailey Selburn A	19	19½	9.75	26	8.80
Canadian Atlantic	7.05	7.55	6.35	9	5.65
Canadian Devonian	6.80	7.35	2.00	9.35	2.90
Home Oil A	13⅝	14½	11¼	16½	10¼
Merrill	16⅛	17¼	8.60	22½	11¾
Pacific	17¼	17¾	12⅜	20⅛	12⅝
Royalite	15¾	15¾	14⅞	18¼	12½
Triad	10	9.90	6.75	12	5.50
Canso Pete.	5.05	4.85	1.98	5	1.61

* * *

THE BUZZ IN BOARD ROOMS—is almost non-existent. Activity and interest in mining and oil issues has fallen off sharply. Even the usually highly-volatile speculatives are failing to attract attention. Main reason according to brokers: an expected audit of exchange member house accounts. This audit usually brings about liquidation as traders try to put their accounts into good shape. And this selling occurs at a time when other speculators are reluctant to venture into the market in order to maintain their accounts in good standing.

Even some favorable drilling results fail to stir market. **Chibougamau Jaculet** is in this category in slipping back to $4.90 after hitting $5.50 . . . **Norpax**, after bumping ahead to a new top at $2 sags to $1.81, compared with $1.62 about 10 days ago. Activity in Norpax very heavy as company reports drifting into ore at its Werner Lake property.

* * *

Other favorites of a week ago still dominated. **Consolidated Regcourt**, interested in a nickel prospect, churned wildly with promotional interests reported to be absorbing short-selling and still able to carry the price to $1.33 at one time before being forced back to $1.12, a gain of 8c on the week . . . **El Sol Gold** is another repeater in climbing to a nine-year high at 35c before settling to 28c.

The street adage of "sell on the news" was proven by Advocate **Asbestos** which drops back to $4.55 from $4.80 after reporting a copper find on its asbestos property in Newfoundland. It sold down to as low as $4.35. Advocate is a fairly new company with shares initially sold to the public at $5.

* * *

Penny prospect—**Jellicoe Mines**—has trouble getting anywhere at around 25c because of heavy capitalization after company reports what street talk describes as an interesting copper show at its Shebandowan area property.

Leading copper producers settle back as public interest lags. **International Nickel** slips to $103 from $104½. **Noranda** at $61 is down from $62⅞. Developer **Geco Mines** sags $2 at $18. **Chromium Mining** bumps ahead to $3.40 from $3.30 as annual report shows improved earnings.

A feature in the over-the-counter trade is **Rio Tinto Canada** at about $3.35. Interest from foreign buyers reported heavy with large supplies of the stock moving from Canada to London. Stock reported coming from one major source on Bay Street. **Northspan Uranium**, part of the Rio Tinto group, encounters some pressure at $4.10, compared with $4.85 recently.

* * *

ON THE "BLACK GOLD" FRONT — profit-takers continue busy. The odd issue breaks away from the pack. **Midcon** finds support for a gain to $1.30, later slipping to $1.24, compared with $1.20 recently and **Canso Natural Gas** rises to $1.70 from $1.35.

Parker Drilling, a usually quiet trader, spurts ahead to $6⅞ from $6 as traders looking for a "special situation" jump in. Drops back to $6¼. Stock was trading at $5½ before interest appeared. Talk is company has earned about $1 a share and stands to benefit from increased rate of development drilling in western Canada.

Permo Oil & Gas convertible preferred, offered recently at $2 a share (FP, Sept. 8) first appears on the board at $2.38, quickly drops to $2.15. Stock had sold as high as $2.40-$2.50 over-the-counter.

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What did

CANADIAN MARKET LETTER

say about

BELCHER MINING

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Canadian Market Letter No. 567 (Aug. 3, 1956) said in part: "No further options expire now until October 6 with the prediction that the interval will be plagued with a continual declining market in Belcher shares. It would not be surprising to see the shares sell back to the early June base figure of $2.00-$2.25."

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MINING INVESTMENTS

North Rankin Main Raise Values up to 7% Nickel

Massive sulphides have been encountered in the main raise above the 200-ft. level at **North Rankin Nickel Mines**, officials announce.

The raise was made 62 ft. up from the level at a point halfway along the orebody. Drilling near the raise previously gave values of up to 7% nickel and 1.5% copper.

All work is being done on the 200-ft. level. A second level was established at 300 ft. from the 330-ft. shaft.

North Rankin is shooting for production by March, 1957, with mill concentrates to be shipped out of the Northwest Territories property by water during the shipping season. A 250-ton daily capacity mill is being built.

Plans for further underground development call for two subdrifts from the main raise, 50 and 80 ft. above the drift level. Raises in ore will also be taken on the extreme eastern and western limits. The 300-ft. level will then be opened up.

North Rankin is believed to be negotiating with U. S. interests to take the mine's output of concentrates in 1957. After that, production would be taken by **Eastern Mining & Smelting's** new refinery-smelter at Chicoutimi.

All equipment and supplies to complete mill construction are now on the property and several buildings and units are nearing completion.

The company estimates it has 460,000 tons of ore in reserves, averaging 3.3% nickel, .81% copper, plus values of precious metals. Of the total, 273,000 tons averages 4.55% nickel and 1.05% copper.

* * *

Carnegie Dickers With A. Smelting

Carnegie Mines reports that it has received an offer from **American Smelting & Refining Co.,** to spend up to $3 millions on development of Carnegie properties in British Columbia.

The suggested agreement covers 60 years and would give American Smelting a 55% interest in profits and Carnegie Mines a 45% interest. American Smelting would advance the money for examination, exploration and development and to place Carnegie properties on a producing basis. Negotiations are under way on the proposal.

Carnegie recently resumed operations at its lead-zinc-silver property at Silversmith and has been shipping to **Consolidated Mining & Smelting.**

* * *

Lyndhurst Mining Has Asbestos Show

An asbestos find on the surface of **Lyndhurst Mining Co.** property is revealed in the annual statement of the company for 1955.

R. J. Jowsey, president, reports that the asbestos was found in the northeastern sector of the property. A ground magnetometer survey located a peridotite mass 150 to 300 ft. wide and 2,800 ft. long. Fibre lengths observed ranged from ¾ in. to 1/16-in.

This asbestos find now is being explored under a drilling program.

Meanwhile the mining plant is operating smoothly and is capable of handling up to 2,000 tons daily of copper ore. Actual milling started early in July and concentrates have been shipped to **Noranda Mines** for smelting, refining and marketing.

Detailed underground work is under way to obtain a clear picture of ore potential. Headings are being driven on the 300 ft. level to tap the No. 3 zone and the No. 1 zone which have indicated new ore possibilities.

* * *

Ont. Gold Output Lower In July

Ontario's 31 producing gold mines had output worth $6,586,295 in July, down from $7,092,150 in July 1955, the provincial Department of Mines reports.

There were 711,076 tons milled containing 191,009 oz. gold and 31,212 oz. silver. In July 1955, the 33 mines in production milled 755,964 tons of ore with a content of 206,012 oz. gold and 35,613 oz. silver.

Several of the mines were closed for holiday periods and **Starratt Olsen** closed its mine completely at the end of the month.

Meanwhile, staking activity is slower in Ontario than last year. In the first eight months of the year a total of 37,270 claims were staked, compared with 41,047 in the same period last year. And in August, 5,140 claims were staked, compared with 5,727 claims in Aug. 1955. Activity in August centred in the Port Arthur, Sudbury, Patricia and Eastern Ontario divisions.

* * *

Heath Gold Drills Probe Old Mines

Two former mines in the Fort William area, producers of copper and silver about 100 years ago, are undergoing a diamond drilling program by **Heath Gold Mines Ltd.,** officials report.

First hole on the site of the old Spar Island mine has reached the main vein. Drilled at a 45-deg. angle, the hole has cut 4 ft. of mineralization at 250 ft. The company expects the hole will intersect the main vein by 350 ft.

Drilling is also being carried out at the old Prince's mine. The two mines originally produced limited quantities of copper and silver but were closed down because of lack of water transportation at that time.

* * *

Need Cheap Power For N. B. Manganese

Short power supply at high cost stands in the way of developing a manganese smelting industry in New Brunswick, according to an American metallurgist.

Dr. Marvin Udy has pointed out that smelting ore in the province would not be economical so long as unfavorable power conditions exist. Aside from power, the economics of a smelting industry appear good for New Brunswick because of large ore deposits which can be mined cheaply by open pit methods.

Dr. Udy is associated with **Strategic - Udy Metallurgical & Chemical Processes Ltd.** which will soon operate a pilot plant in Niagara Falls, Ont. for a newly-developed smelting process.

* * *

Quebec Smelting Drills Copper Zone

Quebec Smelting and Refining is probing a 4,000 ft. by 100 ft. zone outlined in preliminary prospecting and geological mapping at its Roy Township property.

The company reports copper values intermittently over a length of 600 ft. with selective grab samples assaying from 1% to as high as 15.65% copper and from .25% to 6.75% zinc. Drilling will cross-section the zone and test for copper at depth.

Drilling is also under way at the Marguerite Island property and a geophysical survey is being completed on the 60-claim group in Barlow township.

Sask. Oil Production Surges, Running At Double 1955 Rate

Oil production in Saskatchewan this year is running at almost double the 1955 rate.

June output went over the 1.5 million bbl. mark when average daily production reached 51,000 bbls., according to the department of mineral resources.

Total crude oil production in the month was 1,531,202 barrels as compared with 931,012 barrels in June 1955, according to the government's latest monthly oil and natural gas report.

Of the 1,531,202 barrels of crude oil produced this June, 451,874 barrels was light gravity from south-eastern Saskatchewan, 782,789 barrels was medium gravity, and 296,539 barrels was heavy gravity crude oil.

Cumulative crude oil production for the first six months of this year stands at 8,245,240 barrels, which is almost double the 4,255,651 barrels produced in the first six months of 1955.

At the same time, the department of mineral resources reported that natural gas production for June, 1956, totaled 1,216,907 MCF or thousand cubic feet and brought cumulative production to 8,314,015 MCF. The 1955 statistics were 667,809 MCF and 4,750,099 MCF respectively.

Daily natural gas production for June of this year was 40,563.5 MCF as compared to only 22,260.3 MCF for June, 1955. Daily crude oil production for June of last year was 31,033.7 barrels.

Gross value of crude oil sales to producers during June was $2,374,498.76 with cumulative production valued at $13,020,472,82. Similar periods in 1955 saw value at $2,030,653.65 and $7,116,504.22. Gross value of natural gas sales to producers for June was $32,113.10, while cumulative production was valued at $341,444.40. June 1955 value was $20,269.26 while cumulative production for the first six months of 1955 was valued at $236,954.60.

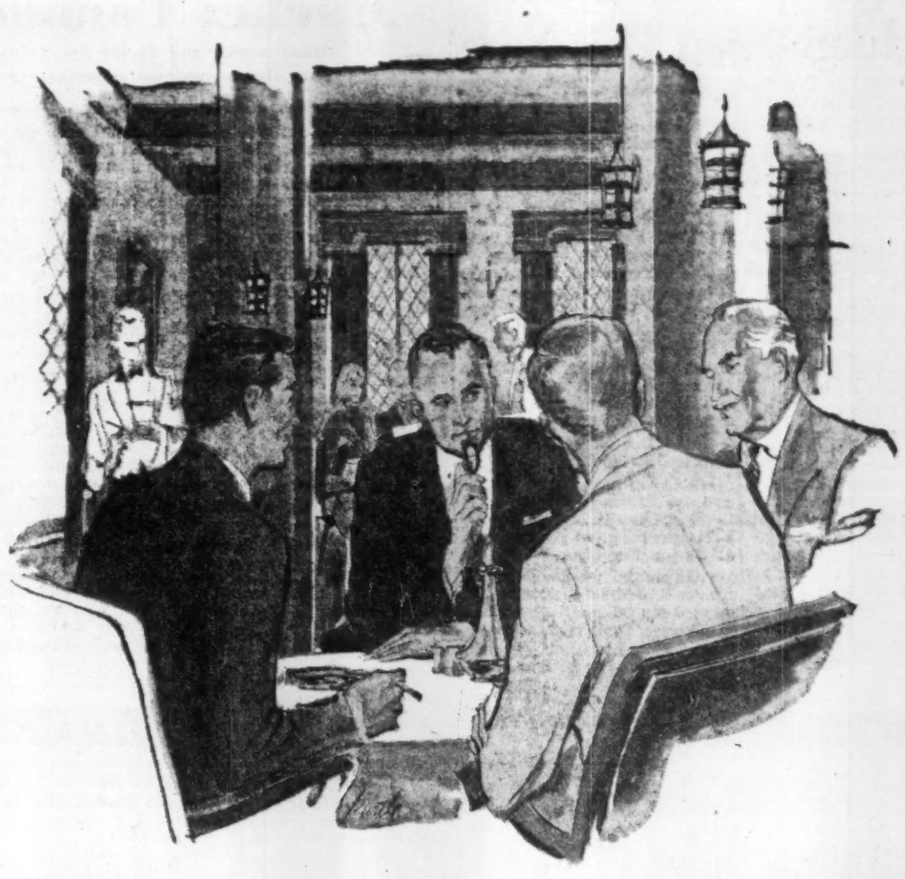
In drilling activity there were 119 licenses issued, two licenses cancelled, and 68 rigs operating. Seventy-six oil wells and two gas wells were completed. Sixty-four oil wells became new producers during the month, with thirty wells abandoned as dry holes.

During June, there were 463,974 feet drilled, of which 312,689 feet were for development, 17,078 feet were outpost, and 134,207 feet listed as wildcat.

Twenty-three oil wells were reported as new producers during the week ending September 7, according to the weekly drilling and land report by the department of mineral resources' statistics division.

In addition to the new producers, 31 oil wells were completed during this period. Twenty-nine licenses were issued for drilling, 37 wells were spudded and 73 were drilling as of the weekend.

As of September 7, there were 2,073 oil wells and 144 gas wells capable of being operated. At the previous weekend there were 2,046 oil and 142 gas wells capable of being operated.



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U.S. Boosts Demand For Nickel 48% Looks To Canada For Bigger Output

By W. L. DACK

Washington's Office of Defense Mobilization has set itself a major task: To boost nickel supplies by 48% by 1960.

That's an extra 140 million lb. of one of the tightest materials in the world today.

Right now Washington isn't sure where all the extra nickel is going to come from or what price it will have to pay to get it.

One thing is certain: ODM officials are counting heavily on Canada and Cuba to supply the major proportion of the additional supplies.

Toward that end they are prepared to push vigorously incentive programs to assure development of new mines.

Right now major Canadian nickel producers — and potential producers — think Washington is going to have to push a whole lot harder before it will succeed in getting much additional nickel from this country.

An ODM official admitted to The Financial Post this week that response to its premium price inducement made in July has been disappointing. Although there have been quite a few enquiries so far, they are not coming from the "right people."

"No wonder," is the way one Canadian nickel official views the situation. "We can get prices of $1 a lb and better on the Continent. Washington does not seem prepared to go nearly that high yet."

International Nickel is certainly not planning a huge $140 million expenditure to open up the Mystery-Moak Lakes ore bodies in northern Manitoba on 64.5c lb. nickel (the ore is low to medium grade).

On the other hand it is highly unlikely that any price negotiations between Inco and ODM—if they have been discussed at all yet—have passed the preliminary stages.

Actually Inco would probably prefer to sidetrack government aids and commitments, develop the Manitoba property entirely on its own and retain its free-market position, if such is possible.

Canada's Output

Right now Canada is supplying U. S. with about 80% of its 300 million lb. annual supplies (around 232 million lb. last year, or some 66% of Canada's entire output).

An interim report on the nickel supply situation submitted to Congress recently by the U. S. Commerce Department and ODM estimates free world nickel supply will increase some 88,000 tons to 303,000 tons by 1960.

(That would not include any production from Inco's proposed Manitoba operation which would just be getting into preliminary production about then.)

The Washington survey places Canada's nickel output at 200,000 tons in 1960, 14.3% ahead of last year.

The report cautions that the increased supply will not likely bring much relief to civilian users. Unless there is a radical change in the international picture, military needs will continue to grow and have priority on available supplies.

If predicted world demand for nickel 25 years hence is to be met, the added production of a new Sherritt Gordon every year, or a new Falconbridge every two and a half years, or a new International Nickel every 14 years would be necessary. This is the view of H. J. Fraser, vice-president and general manager of Falconbridge Nickel Mines, as expressed recently to the Provincial Ministers of Mines Conference in Calgary.

Canada's best hope for increased nickel production lies in the several promising new ore developments occurring in northern Manitoba, Eastern Townships section of Quebec, Kenora, Ont., area and Northwest Territories.

But before any of these could reach marketable stages, new refining capacity would have to be built in this country.

Right now **Eastern Mining & Smelting Corp.** is pushing a big nickel-copper smelter and refinery program at Chicoutimi. Slated for 1957-58 completion plans are to process an initial 15 million lb. of nickel a year.

Inco's Port Colborne refinery is operating near capacity and any decision to develop the big Mystery Lake-Moak Lake orebody in Manitoba would necessitate construction of multi-million dollar new refining capacity.

Falconbridge Mines which recently expanded its refinery at Kristiansand, Norway, has no refinery plans for Canada at the moment.

The picture might be different, however, if one or two of the company's promising ore discoveries now under investigation, proves up.

Sherritt Gordon Mines unique chemical-metallurgical plant at Fort Saskatchewan, Alta., could probably handle a further 10%-15% nickel, but any important increase after that would require costly new plant capacity.

The company is pushing an active exploration program in both the Lynn Lake and Moak Lake districts of northern Manitoba.

Here is a run-down on Canada's top nickel producers and most promising potential producers:

International Nickel Co. of Canada which accounted for 68% of the Free World nickel supply in 1955 (290 million lb.) has been steadily increasing output over the last five years.

Any major jump in production, however, can only result from development of a new sizeable orebody. The Mystery Lake-Moak Lake orebodies some 400 miles north of Winnipeg are "by far the most promising" of any now under company investigation, President H. S. Wingate stated recently.

Top Inco officials discussed power possibilities with Manitoba Government officials recently in Winnipeg. All interest is now focused on this far-northern nickel property.

Company has indicated it will make its announcement on development plans for the $140 million project by the end of October.

Although the grade of ore is low to medium, tonnages are known to be great. Inco officials have remained silent on potential production targets but authorities close to the nickel picture estimate the Northern Manitoba orebodies could likely support an annual production of around 75 million lb.

Falconbridge Mines has two properties under development, in the Kenora district and in the Dominican Republic, which might be considered eligible for a U. S. government premium price deal.

However, no negotiations are being carried out yet.

Falconbridge production this year is running ahead of 1955. In the first six months, refined metals output was up 7% and metals in matte from smelters showed a 10% jump over last year's first half.

Exploration has boosted the company's indicated and proven reserves to a record high of 39.8 million tons grading an average of 1.43% nickel.

Falconbridge produced 45 million lb. of nickel last year. Five producing mines turned out 1.8 million tons, an increase from 1.4 million in 1954.

In addition to its producing mines, Falconbridge has some four others under development as well as several nickel-copper prospects.

One of Falconbridge's top prospects is the nickel-copper property at Populus Lake in the Kenora district. A subsidiary, **Kenbridge Nickel Mines,** is developing the property where a 1,000-ft. shaft is being sunk. Falconbridge reportedly has more than 800 claims in the Populus Lake district.

Exploration is also being carried out in the Dominican Republic.

Sherritt Gordon Mines with its substantial nickel-copper orebodies in the Lynn Lake district of Northern Manitoba and one of the world's most unique chemical-metallurgical refining operations at Fort Saskatchewan, Alta., is operating at a high rate of capacity — some 20 million lb. of nickel and 9.5 million lb. of copper a year.

Although the refinery could handle a further 10%-15% nickel it is doubtful if the Lynn Lake mine could comfortably produce this extra at the current stage.

Anything above this would mean greatly expanded refining facilities as well as further ore developments.

Company has been actively pushing exploration programs in Northern Manitoba, particularly in the general Lynn Lake area.

A close look has also been taken at the hot Mystery Lake-Moak Lake area some 200 miles distant from current mining operations.

Eastern Mining & Smelting Corp., pushing its big nickel-copper smelter and refinery at Chicoutimi, Que. to completion in 1957-58, will produce 15 million lb. of nickel a year initially.

Although negotiations have been held in the past with U. S. government officials, Eastern Mining is believed to be looking to European and U. S. industry to take at least a big slice of total output.

First firm contract signed is for 1,500 metric tons a year for 1958-59-60 for delivery to a group of Swedish steel makers.

Three mines are being developed to provide the initial supply of nickel concentrates to Eastern Mining's copper and nickel refinery-smelter at Chicoutimi, Que.

North Rankin Nickel Mines plans a 250-ton mill on its Hudson Bay property. Production is scheduled to start about March, 1957. Negotiations are under way with European and U. S. interests to take initial production, prior to opening of the Chicoutimi pla..t.

North Rankin has indicated reserves of 460,000 tons averaging 3.3% nickel to the 300-ft. depth. Underground work is continuing.

Eastern Metals, developing a property in Quebec's Eastern Townships, is planning a 500-ton mill to go into production in 1958. Reserves are 1.1 million tons of ore with an estimated eight million lb. of nickel. Drifting is being carried on and shaft has been deepened two more levels recently.

Eastern Mining's own Gordon Lake property in the Kenora area will also supply the Chicoutimi plant. A minimum 1,000-ton mill is planned. Reserves are about three million tons above the 1,000-ft. horizon, averaging 1.24% nickel.

Norpax Oils & Mines Ltd. is drifting on its Kenora district nickel-copper property where the main zone has been opened for about 130 ft. Indicated reserves have been reported at over 1 million tons of ore.

Nickel Rim Mines, producing now from an 800-ton daily capacity mill, is shooting for 1,000-ton capacity this year and possibly 1,500-ton capacity in 1957.

Company ships concentrates to Falconbridge under 10 million lb. premium-price contract which expires early next year. Negotiations are being carried out for future outlets for concentrates.

Nickel Rim has reserves of nearly 1 million tons averaging 0.74% nickel and other reserves of 636,000 tons of 0.89% nickel. Last year, 3.1 million lb. nickel were recovered from ore.

Future Nickel Supplies

(Free World Production in Tons)

	Canada	U. S.	Cuba	New Caledonia	Others	Totals
1960	200,000*	10,000	65,000	25,000	3,000	303,000
1957	180,000*	8,500	25,000	20,000	3,000	236,500
1956	177,000*	7,150	15,500	19,000	3,000	221,650
1955	175,150	3,800	15,150	18,500	3,000	215,600

*U. S. Dept. of Commerce estimates.

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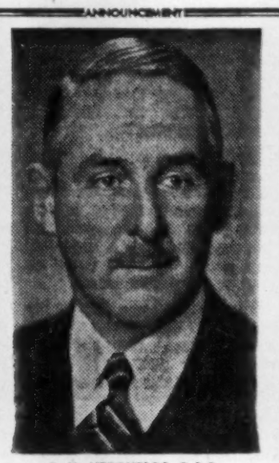

C. H. NEROUTSOS, D.S.O.

C. A. RICHARDSON, D.S.O.

Mr. John H. Davey announces his retirement as President of International Paints (Canada) Limited. He will continue as a Director of the Company. C. H. Neroutsos, formerly Vice-President and Managing Director has been appointed President and Managing Director, while C. A. Richardson, former General Sales Manager, has been named Vice-President and Director of the company. All appointments were effective, September 1.

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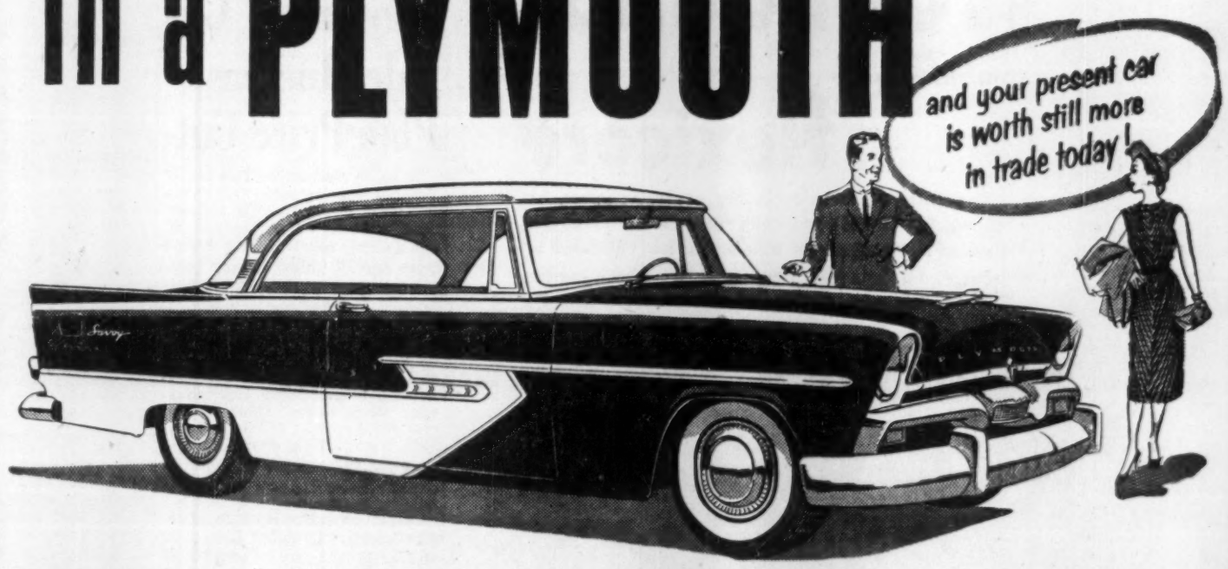

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Letter from London by Adelphi

Let us begin on a noncontroversial note.

London has enjoyed two days of warm sunshine. With the adaptability of their race the people appeared in summery clothes, sat in the parks and behaved as if hot sunshine were a normal feature of British life.

But I doubt if Sir Anthony Eden noticed the change in the weather. He had to face MPs recalled from their holidays and meet the Socialist attack on the two fronts of Suez and Cyprus.

No longer is Eden the smiling, debonair Prince Charming of other days. His face is serious and angry. While his fellow MPs were on holidays he was wrestling with the new Serpent of the Nile. That was difficult enough but with the recall of Parliament he had to face what is called "The Grand Inquest of the Nation."

• • •

Eden Didn't Smile; He's an Angry Man

Hugh Gaitskell is not normally a rough and tumble debater but on this occasion he threw all the punches he knew at the Prime Minister. Nor did Eden smile them off. He is an angry man.

Yet the struggle has not been without compensations for the Prime Minister. Last winter the powerful Daily Telegraph, traditionally Conservative, attacked Eden for failing to give the nation the leadership that it needed.

This was a startling break with that newspaper's tradition, but Suez would seem to have brought the newspaper back to Eden's side. When the debate on Suez was concluded the Telegraph said in its leading editorial: "It is a sad day when Her Majesty's Opposition appears more suspicious of Her Majesty's Government than of Colonel Nasser. That is, however, the only possible meaning of the vote of censure so decisively and deservedly defeated."

The mass circulation Daily Mirror also caused its readers to blink. Having vilified and ridiculed Eden without mercy it suddenly offered a full page to a journalist Tory MP to write what he thought of the Daily Mirror. Believe me it made tough reading.

Now that the trade union conference is over the Socialist Party will shortly be holding its annual seaside conference when the parliamentarians and the trade unionists will gather in such unity as may or may not exist.

There is always a rivalry between the two wings of the Party although they are completely in accord in their opposition to the Tories.

Gaitskell's Stand A Touchy Position

If by chance the Suez problem is successfully solved then Gaitskell's position will be difficult. He was quite right to demand the recall of Parliament and he was quite right to attack the Government for its errors and miscalculations. But when he forced a vote he broke with long-established Parliamentary tradition.

It is almost unheard of for the parties to divide in the lobbies on foreign affairs. Yet that is precisely what Gaitskell did. The repercussions from that decision may be very damaging to the Socialist leader.

However, the British nation has not been concerned solely with politics and the weather. The authorities have had to deal with the imported phenomenon of the film "Rock Around the Clock" with its "Rock 'n' Roll" rhythm.

This quaintly named affair is an American jazz film which seems to have the same effect on our teddy boys as the tom tom has on the occupants of the jungle. Young men with their tubed trousers and their black Byronic hair-do have gone into an ecstatic frenzy which has brought them into conflict with the police.

• • •

All Very, Very Silly But It Hurts Cinemas

It is all very silly but the authorities showed remarkable patience. Finally, however, the film has been banned in many towns.

This is a sad blow for the cinemas which are more and more feeling the competition of television. That calm Hollywood philosopher Sam Goldwyn, who is visiting London, said this week: "Well, why should the public go to a bad film in a cinema when they can see a bad film on television?"

Incidentally the editor of the Daily Mirror gave a large dinner party at the Dorchester for the Hollywood magnate and his wife. The guests included Hugh Gaitskell and also Mr. and Mrs. Susskind. Mr. Susskind will shortly be leaving for Toronto where he will take over the leadership of the Toronto Symphony Orchestra.

Your London correspondent had a pleasant chat with him at the dinner, but of course was not able to do more than tell the distinguished musician that Toronto is now the Athens of the North American continent.

• • •

The Canadian colony in London will gather in force at St. Paul's Church in Baker St. for the memorial service to Billy Bishop. Tributes will be paid not only to his gallantry in aerial combat but to his consistent services to aviation.

He was the leading figure of a remarkable group of Canadian fighter pilots in the 1914-15 war. It may be that by now the names of Red Mulock and his associates of the air have been dimmed by the passing of time but they were unexcelled in skill and spirit.

Among those who will attend the service will be Brig. Critchley who was in charge of RAF cadet training in the Hitler war. Although Critchley is now blind his activities seem to multiply rather than lessen. His energy is inexhaustible and his spirit is that of Invictus.

• • •

Waited for Churchill But He Didn't Speak

In the troubled times through which Britain is passing there was a widespread hope that Sir Winston Churchill would break his silence and intervene in the Suez debate. His authority over the minds of the people has not diminished and the temptation to intervene in the debate must have been very strong.

But Churchill has a delicacy in such matters that is oddly at variance with his native pugnacity. In no way did he wish to belittle the authority and the prestige of the Prime Minister. So he merely sat in his place and said nothing.

Finally we must report on our old friend the Stock Market.

It has sagged but it has not panicked. When the shares of the oil giants seemed a bad buy a lot of investors turned to **Triad** which is safely immune in the fastness of Canada.

Westburne Oil Profits Decline First Half-Year

Westburne Oil Co. had a net profit of $30,294 in the first half of 1956, down slightly from a profit of $31,364 in the same period last year. An interim balance sheet shows investments with a market value of $4,264,924, up 19% from the end of 1955. These investments are carried at $3,522,641.

In addition, the company has an investment of $693,240 in a new wholly owned subsidiary — **Westburne Oil Development.** This subsidiary started this year and has obtained interests ranging from 22.22% to 50% in 1,920 proven undeveloped acres in Alberta.

Seven wells have already been completed and it is expected that 22 wells will be drilled this year, giving the company a net interest of eight wells, Joseph Beaubien, president, states.

Peak Shipments At Steep Rock

Steep Rock Iron Mines established another record in August when iron ore shipments reached a new monthly peak of 671,000 tons. For a week output was in the 29,000-31,000-ton daily level.

The August record brings total shipments this year to 2,110,000 tons, well within range of the 3,250,000-ton 1956 target. Shipments will be maintained well into November. Plans are to gradually step up shipments to an annual level of 5 million tons by 1960.

Consumers' Gas Sales Increase Plan Price Cut

Sales of **Consumers' Gas Co.** of Toronto were up some 75% in the first nine months of the current fiscal year at 5.6 billion cu. ft. Residential sales in this period were up 67% at 3.5 billion; commercial sales up 40% at 700 million cu. ft. and industrial was up 133% at 1.4 billion.

Company officials are looking for another substantial sales gain in 1957, particularly in the residential, householding and industrial sales fields. Householding customers rose to 14,200 in June, 1956, from 4,725 at same time the previous year. Some 10% of residential customers now are householding customers.

Capital expenditures in the nine-month period to end of June were $5,175,000 and are estimated to amount to $7,850,000 to end of September. Of this $5,750,000 will represent extension to mains and street services and $1.2 million will represent approximate cost of purchasing and extending the Oshawa gas distributing system. Expenditures in fiscal 1957 should be fairly similar to this year's.

The company has now made application to the Ontario Fuel Board for permission to reduce rates to Toronto and district customers. This will mean savings for household, commercial and industrial natural gas users. Although savings under the new proposed rates will be enjoyed mostly by the larger volume users the average customer will also have some savings under the new rates.

"We are pressing our expansion program because increased natural gas sales are the only road to more rate reductions," states Oakah L. Jones, vice-president and general manager of Consumers'.

The new $1-million-a-year voluntary rate reduction follows one of $2.5 million on Feb. 17, 1955 and one of $550,000 last September. The following comparisons show the effect of the new natural gas rate reductions proposed by Consumers'.

Consumption Cu. Ft.	Mfg. Gas Rate Prior to Feb. 1955	Present Rate	Proposed Rate
200	1.60	1.47	1.46
1,000	4.34	4.03	3.94
5,000	18.78	10.53	9.19
10,000	35.50	16.53	13.19
20,000	69.38	64.53	63.19

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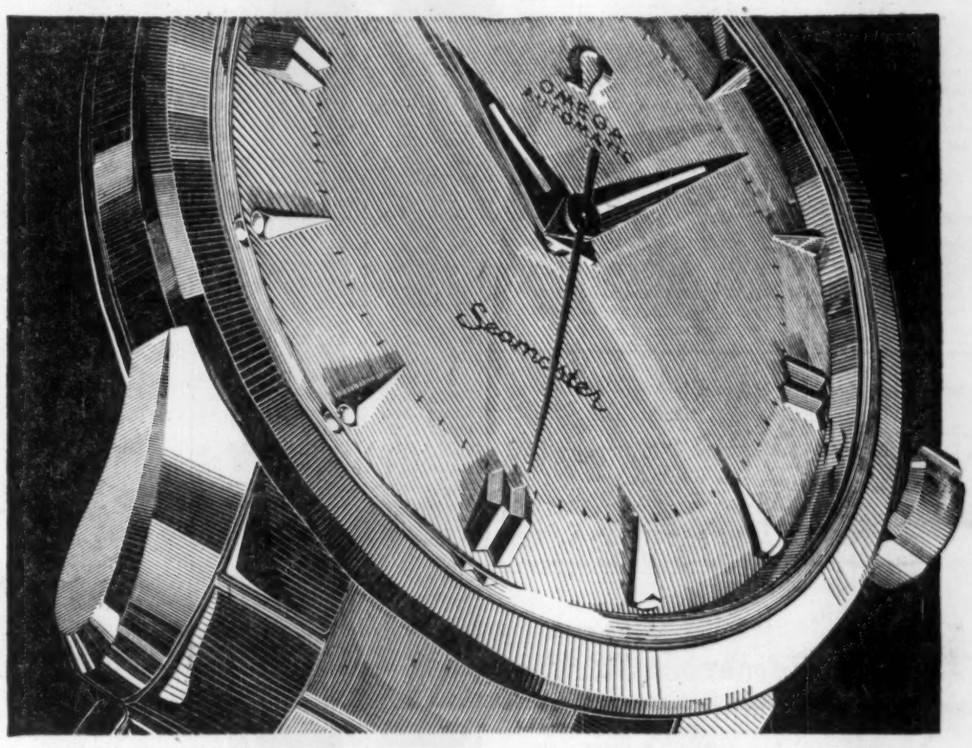

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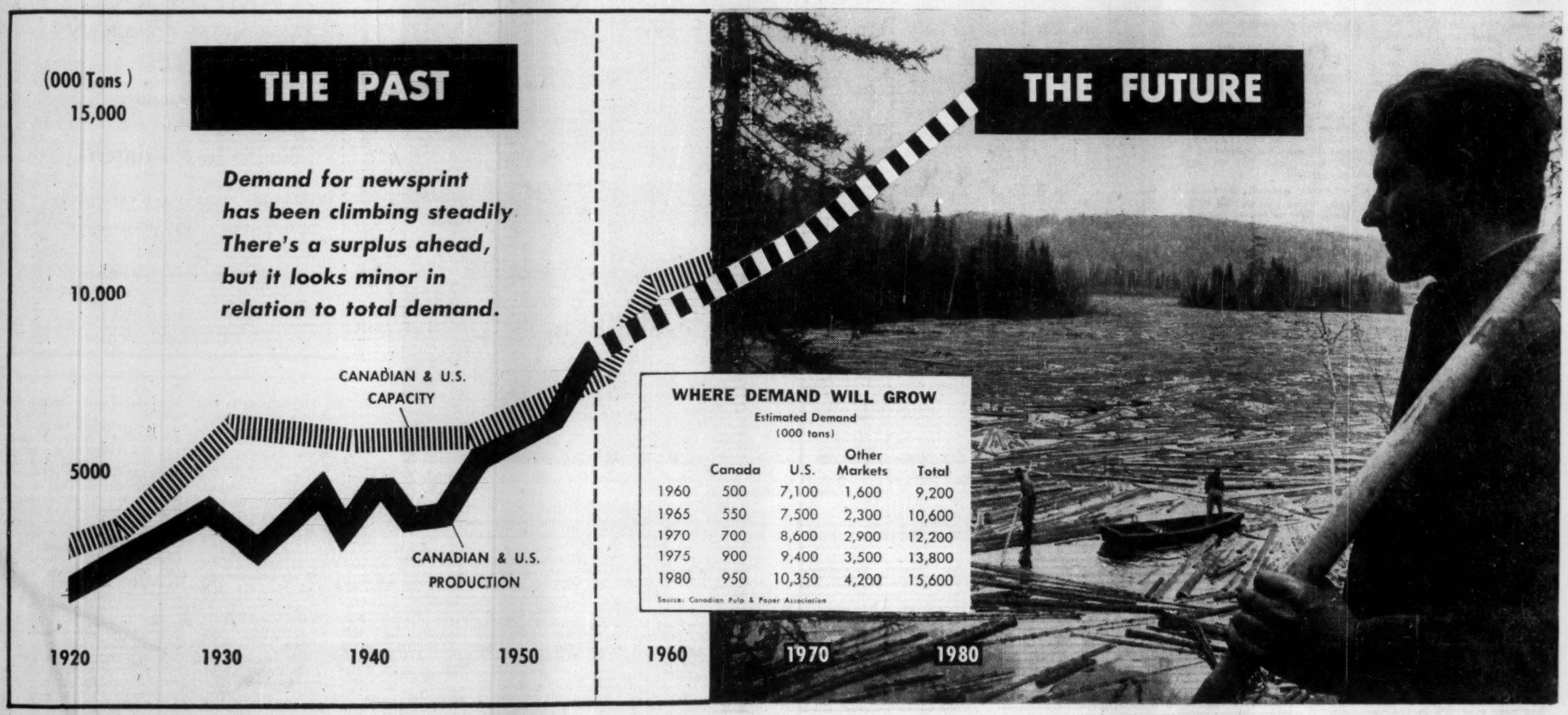

WHERE DEMAND WILL GROW

Estimated Demand (000 tons)

	Canada	U.S.	Other Markets	Total
1960	500	7,100	1,600	9,200
1965	550	7,500	2,300	10,600
1970	700	8,600	2,900	12,200
1975	900	9,400	3,500	13,800
1980	950	10,350	4,200	15,600

Source: Canadian Pulp & Paper Association

Pulp and Paper: A Feature Report

Beyond the Shadows, a Newsprint Boom

By ALLAN FENTON

In sunny or cloudy economic days, the newsprint industry's ability to earn dollars is reflected directly or indirectly in the lives of all Canadians. Newsprint is one of the cornerstones of the economy.

Canada's largest and richest industry is pulp and paper. Newsprint accounted for 53% of its $1.3 billion gross value of production in 1955, when Canada produced 6.2 million tons or about 50% of world newsprint output.

Its exports last year of 5.8 million tons were valued at approximately $666 million and moving between countries in international trade amounted to 80% of total world newsprint. Some 78% of these exports went to the U.S. and represented about 23% of all Canadian exports to that country.

That means newsprint accounts for one out of four U.S. dollars available in trade to Canada. In turn, these dollars can be used to purchase the countless products of other American industries which Canada needs.

These are a few reasons why the current record level of newsprint production, sales and earnings is important to all of us. And why its future is so directly related to our general well being.

Despite the shadow of over-capacity which faces producers in the next two or three years, the longer term outlook is sunny.

Over the next 25 years economic barometers indicate:

- Demand for Canadian newsprint will double from 6.2 million tons in 1955 to 12.4 million tons in 1980.
- Shipments to the U.S. will increase 50% from 5,070,000 tons last year to 7,620,000 tons.
- Exports to other markets than the U.S. will increase five-fold from 725,000 tons in 1955 to 3,830,000 tons.
- At home, shipments will increase from 430,444 tons to 965,000 tons.

A Worried Look

While this is indeed a rosy picture, some observers are eyeing with concern the outlook for 1957 and 1958 because of new capacity coming into operation in the wake of a $350-million expansion program currently under way in North America.

With memories still vivid of the dark days in the 30s when 50% of Canada's newsprint industry was either in receivership or in default of bond interest, producers are understandably cautious. It is natural that they ask: Will the market absorb the additional output?

It appears likely there will be some capacity in excess of new demand, possibly in 1957 and certainly in 1958.

This is an ironic situation because Canadian mills are today struggling to meet the demands of their customers.

In a world hungry for news of the Suez situation, a Big Power conference, the World Series in baseball or a Big Four football game —and with the booming economy pushing advertising linage to new records—newsprint demand continues to outstrip supply, although there are signs of easing in the recent tight situation.

Therein lies the crux of the matter. In the U.S. the historic average increase in consumption is about 2% per annum or 120,000 tons. In 1955, consumption jumped a startling and record 8% or 475,000 tons over 1954. For the first seven months this year there are indications that this rate of gain is slowing down although consumption is still at record levels—3.7% or 140,000 tons higher than the same period in 1955.

On the basis of the historic trend, U.S. will need 360,000 additional tons between 1956 and the end of 1958. On the basis of the 8% jump last year—and that isn't envisaged even by the most ardent industry booster—that country would require 1.9 million tons extra, close indeed to the amount of new capacity in both Canada and the U. S. coming in over the next three years.

It is more likely the annual increase will level down from the current 3.7% in the first seven months this year, closer to the historic level because of new capacity. If so, requirements this year will be approximately 250,000 tons higher than 1955, and perhaps total 400,000 to 500,000 tons over the following two years. This would mean an increase in consumption of some 700,000 tons by the end of 1958.

Increased Capacity

In the same period Canadian mills are scheduled to increase installed capacity, either through new machines or speed-ups of existing ones, by about 1.3 million tons to some 7.2 million tons. U.S. mills are expected to boost capacity by about 800,000 tons to about 2.3 million tons.

In 1957, the increased capacity in Canada will amount to 14% and in 1958 to 20% of rated 1955 capacity. In the U.S., the increase will amount to roughly 30% and 60% respectively of last year's rating.

On the assumption U.S. consumers will take 700,000 tons of newsprint more over the next three years, the additional 2.1 million tons of new capacity indicates a potential surplus of 1.4 million tons.

At the same time, there will be a significant drop in the supply now being obtained from abnormal sources—high spot purchases in overseas markets, mills converted to newsprint operations—because of the abnormally high demand. The amount is difficult to estimate but could be in the neighborhood of 500,000 tons.

Taking this figure into account, the estimated surplus by the end of 1958 would be 900,000 tons or only 9% below rated capacity at that time of some 9.5 million tons. That would mean North American mills would still be operating at better than 90% of capacity, a good figure indeed, although sharply below the 102% currently.

But this doesn't take into account the growing demand overseas, a potentially large market. Nor does it consider that a number of the new projects to increase capacity may be slower coming into operation than presently contemplated.

Newsprint companies today are keenly tuned to market conditions. Twenty years ago when the industry was in the depth of depression, the situation was remarkably different. Major undertakings then were chiefly by new companies financed by new money, and the programs had to go ahead at top speed.

Now, most of the companies expanding are long established in the field, largely using their own capital, in close touch with markets and able to slow down expansion if need be.

The Big Dilemma

But the big question many producers face today centres on the short and long-term view of the newsprint market. This is their dilemma:

They know that demand for their product in the future will be much greater. So, to meet this demand they should plan for expansion now. Their views are spurred by need to get good sites, cheap power and ample timber limits before a competitor moves in ahead of them.

However, if they do go ahead with a capital expansion program and the high interest and construction costs involved today, they run the risk of expanding newsprint capacity beyond what the market will absorb. What should they do?

There is no doubt that U.S. mills will supply more of their home markets in the future. But it is also reasonable to believe Canadian shipments there will continue to show tonnage increases, although perhaps at a much lower than the average annual increase of 400,000 tons between 1945-50 or the 277,000 tons annually over the past five years.

If Canada received orders for only 400,000 tons or somewhat less than half the potential new U.S. demand by 1958, there would be a gap of about 900,000 tons between new Canadian capacity and demand in the U.S. Across the border, U.S. producers would have about 560,000 tons excess capacity if they got only 300,000 tons of the additional market at home. But, as noted, there will be a drop of half a million tons now purchased from abnormal source, so the gap is substantially narrowed.

These estimates leave little room for doubt that the years 1957 and 1958 will see adequate North American newsprint supply. They should be: The current three-year round of expansion has been exceeded only during parts of the decade in the '20s and exceeds even the rise during the three-year period following removal of wartime controls.

The rapid growth rate was a result of the unprecedented and unexpected high rate of U.S. consumption last year. It followed a period of quite moderate increases since 1950. A factor moderating the increases has been the gradual adoption of narrower columns, and other changes. by many publishers to get more economic use of both presses and newsprint.

Whither the Press?

The modest size, however, was more generally attributed to the competition provided by the introduction and rapid growth of television. It was inevitable that some competitive effects should be felt by all other media, although in newspapers the effects have been comparatively slight and appear temporary.

The trend was indicated in 1955. It was a booming year in the U.S. economy and there was a striking gain in advertising linage. The squeeze on newsprint supply became apparent in the fall of the year.

Faced with shortages, our producers stepped up expansion plans but because of the time lag between new installations or speed up of existing machines, production wasn't able to overtake rising demand.

It wasn't surprising. The increased consumption of 475,000 tons last year in the U.S. was more than eight times the average annual increase in the 1950-54 period and some 30% above the yearly average from 1945-54.

Some producers rationed supplies to consumers at the turn of the year. But new capacity has already started to come into operation, production is coming closer to apparent demand.

For the first seven months, Canadian shipments to the U.S. were up almost 100,000 tons over the 1955 period, an increase of 3%. In June, the upward trend was arrested with a drop of 4% on the month—reflecting spot purchases in overseas markets earlier as imports from Europe jumped 134%. In July, shipments were up 8%, while U.S. consumption rose only 2.7%.

So, with U.S. consumption growing at a slower rate and with an accelerated rate of capacity gain, it is natural to ask: what next?

While Canada will lose some of its present share of the U.S. market, tonnages shipped there will undoubtedly increase in both the near and long terms. In the past five years, for example, Canada's total share of the U.S. market has dipped from 81% to 78% and will likely be about 77% this year. But tonnages shipped have increased from 4,748,000 tons to 5,025,000 tons or 9%. This year shipments will likely be 175,000 tons or 3.4% higher.

Hard to Measure

For the future, as in the past, consumption is a difficult factor to measure. It is affected by many factors: population, family formation, advertising budgets, proportion of ad budgets to newspapers and other media, Gross National Product, personal income, newspaper circulation. . . .

On a longer term basis, however, there are good yardsticks for determining consumption and providing some important indicators to future demand in all countries for Canada's supply. One means was used by the Newsprint Association of Canada in its brief to the Gordon Commission on Canada's economic prospects. Here's how it works:

If there is a relationship between economic development and per capita newsprint consumption—and there is good evidence there is—there should be a relationship between these two things in a particular country over a period of time: as an economy develops and expands, so also should per capita consumption of newsprint.

By eliminating the war years and immediate postwar years when newsprint consumption was restrained for lack of supplies and also by averaging the data to eliminate inventory factors, defects in this calculation are minimized.

In the 1926-29 period, per capita GNP in 1949 dollars was $867.3 and per capita newsprint consumption 37.25 lbs. In the 1950-54 period, per capita GNP was $1,320.20 and per capita newsprint consumption was 52.70 lbs.

The close relationship between these data provides a means for projecting newsprint demand. Using an estimated per capita GNP figure, in 1949 dollars, of $1,980 per capita for 1980, consumption of newsprint would be 74.9 lbs per person.

Total Consumption

If population in Canada in 1980 is assumed to be 25.75 millions, total consumption would amount to 964,000 tons compared with 3[illegible],000 tons in 1950, 430,000 tons in 1955, 484,000 tons in 1960, 575,000 tons in 1965, 692,000 tons in 1970, and 820,000 tons in 1975.

This means that in the next 10 years Canada will have an additional market at home for some 125,000 tons and in the next 25 years of almost 400,000 tons and the average annual growth is about 15,000 tons.

In the U.S., as noted, the proportion of U.S. newsprint requirements supplied by domestic producers in recent years has turned upwards. In 1950, U.S. capacity totaled just over one million tons. By 1955, this had reached 1.4 million tons and a further 800,000 ton expansion has been announced. More tentative plans might raise capacity to 2.4 million tons by 1960.

If all these plans were completed and if U.S. exports remained about the same proportion of output, U.S. domestic shipments would total about two million tons or about 30% of total U.S. needs.

Much of this expansion will have taken place under special program containing accelerated depreciation provisions. This program was conceived during the shortage conditions which prevailed during the Korean war.

There is every indication U.S. demand and supply will be in good balance in the next few years when the program is completed and this provides a basis for assuming that the location of new capacity in Canada and the U.S. will be determined by free competitive forces. On this assumption, it is expected Canadian mills will maintain their position in the expanding U.S. market.

Estimates are that U.S. requirements will amount to 7,200,000 tons in 1960, 7,850,000 tons in 1965, 8,650,000 tons in 1970 and 10,450,000 tons in 1980. Scandinavian supplies will decrease to 100,000 tons vs the present 125,000 tons.

Situation Changes

Canada will supply 200,000 more tons to the U.S. by 1960 or 5,025,000 tons compared with 5,025,000 tons in 1955, the Gordon Commission brief indicates. This estimate in the light of recent events is shown to be low. But it emphasizes how quickly a situation can change.

By 1956, supply from Canadian mills will have increased to 5,710,000 tons, by 1970 to 6,380,000 tons and 1980 to 7,620,000 tons. On the basis of this estimate, the potential market increase to the U.S. is 700,000 tons by 1965, and 2.6 million tons by 1980.

U.S. mills will boost their supply to domestic consumers from 1,270,000 tons in 1955 to 1,850,000 in 1960, 2,040,000 tons in 1965, and 2,730,000 tons in 1980. Their increase will amount to about 1.5 million tons.

So the long term demand for Canadian newsprint in the U.S. market appears to be excellent. In the short term, however, there likely will be problems with excess capacity. If so, overseas markets will assume added importance.

Prospective economic and population trends in overseas countries, plus current low levels of newsprint use, indicate rapidly rising demand for the future.

The principal limiting factors on domestic supply in most of these countries is wood in species and locations that can be used for the economic production of newsprint, though in the underdeveloped countries particularly, lack of money also imposes serious limitations.

It seems reasonable then that the available forest and capital resources in the rest of the world will not be able to provide the increase for an increase of this magnitude in domestic output. If demand is to be met, overseas countries must look increasingly to North America.

Moreover, with the more rapid rising economic levels and expanding populations in other countries, the competition of other pulp and paper products and other forest industries for available wood supplies will be even fiercer than on this continent.

Overseas Demands

It is estimated overseas requirements from Canada will increase from 725,000 tons in 1955 to 1,350,000 tons in 1960, 2,610,000 tons in 1970 and 3,830,000 tons in 1980.

Total overseas imports will increase from 955,000 tons last year, of which the U.S. supplied 230,000 tons, to 1.6 million tons in 1960, 2.9 million tons in 1970, and 4.2 million tons, 1980.

That means four million tons of newsprint annually will be shipped abroad and U.S. will supply 370,000 tons. The remainder, some 3,830,000 tons, will come from Canada.

There are indications Canada is already making strides to enter this market on a bigger scale. And, if this country has surplus capacity available in the next few years it should be the means of restoring the balance.

The recent trend in overseas exports is significant: From a low of 208,000 tons in 1950—when exchange problems were particularly severe—shipments have risen to 725,000 tons in 1955 and should approximate 750,000 tons this year.

By 1960, this will increase by an estimated 50% to 1,350,000 tons and by 1956 by 168% to 2,025,000 tons.

So, even if Canada doesn't increase tonnage sales to the U.S. as quickly as she has in the past there's still a big overseas market to be won.

It could point the direction to large-scale sales in the future.

Biggest Market

In Canada's biggest overseas market, the U.K. shipments have increased 11-fold since 1950 from 28,000 tons to 307,000 tons last year. Newsprint is still rationed but controls are gradually being eased. It was the government's intention to lift regulations earlier this year but due to the intense shortage, fear was expressed that this action would contribute to higher prices. As a result, U.K. publishers agreed to voluntarily retain rationing of newsprint until the situation eased.

In the past five years Canadian shipments to overseas markets have increased by more than 500,000 tons, still representing only 12% of total supply. More than half the increase has gone to the U.K.

With a total demand overseas for Canada newsprint foreseen at 1,350,000 tons by 1960 and 2,025,000 tons by 1965, it looks like a vast field in which to market.

Of course, the rate of expansion in overseas markets is perhaps more subject to political policies and restrictions than demand might indicate. But Canada looks like the best source of supply as their own sources appear incapable of meeting the big new potential demand.

If this is the case, Canadian mills should have plenty of opportunity to expand beyond even the conservative forecasts. But, in any case, the future looks bright.

In Mills, Forests: New Challenge

Canada's big, rich world of forest, stream and mill for the wood, water, power and means to support Canada's largest industry—pulp and paper—faces new opportunities and challenges in the next 25 years.

Stimulated in part by man's desire to record and read of hopes, fears, dreams and aspirations, the industry will have to double production to keep pace with demand.

Although there will be many new automatic devices to speed up operations, it won't be a push-button world based on "automation." Man will still be the key to unlock the treasure chest of natural resources.

There will be reduced handling of wood from forest to mill, high speed pulping, faster machines and papermaking controlled by automatic devices. True, these advances will mean that manpower needed per ton of pulp will be less than it is today. But the continued growth of demand for the industry's production also will result in an over-all increase in manpower needs.

- In 1980, total manpower requirements of the 130 mills today on the basis of the present 40-hour week is estimated at 75,000 production employees and 12,000 in other classifications or a total of 87,000 workers, about one third more than now.
- In the next 25 years, wood pulp production will double from about 10 million tons to 20 million tons. The addition of more than 10 million tons capacity, plus new machines to convert the pulp into newsprint and other pulp and paper products will impose heavy demands in terms of capital and wood requirements as well as manpower.
- These wood pulp needs will mean addition of about 430,000 tons of new pulp capacity each year but this will have to come from more costly additions to plant and equipment. In the past 10 years, this rate of increase annually was sustained but much came from capacity which had been kept idle in the war because of material and manpower shortages.
- From Canada's forests, the industry will require an annual pulpwood cut of more than 27 million cords, 14 million cords higher than 1955. Fortunately, the country is endowed with bountiful natural resources.

From Forest and Stream

The productive forests stretch 825,000 sq. miles — almost as large as the total land area of the two biggest provinces, Ontario and Quebec. In her myriad rivers and streams is the means of transporting wood to the mills and the basis for extending forest area which can be logged economically.

In these waters is the valuable asset which also carried 80% of the annual pulpwood harvest to the mill. They also provide a source of process water—vital in the pulp and paper operation—and some 500 million gallons of water are used annually in the mills. For hydro-electric power, the rivers provide 25% of total annual Canadian consumption for the pulp and paper industry.

With an ample supply of the basic raw materials, the growth and development of Canada's pulp and paper industry was not only logical but inevitable. Today of all the wealth created by all primary sources of Canadian production — agriculture, forest, fisheries, trapping and mining—about one third comes from the woods.

The future of the industry appears equally assured. Its paper has been aptly described as providing "the currency of civilization and the bedrock of culture," while its paperboard is the "handmaiden of trade" and its pulp the raw material for paper and a host of other products.

Industry's Growth

The industry's efforts will continue to be symbolized by rugged men with spiked poles, spurring logs down swirling rivers to the mills where great pulpwood piles can be seen as the standard of a pulp and paper town, the basis of Canada's biggest industry.

The growth of the industry is divided into two principal periods. Between 1900 and 1920, there was rapid growth based on new technology and market prospects. From 1920 to 1956, there has been a slower, more evolutionary expansion.

PULP AND PAPER MILLS have their own mechanized kind of beauty, stark and clear, but unlike the tangled beauty of the forests which supply them.

Apart from technological and market factors, there have been other influences at work which have pushed forward industry development. For example, pulp and paper products are mainly service commodities whose use tend to correlate with general living standards and economic development.

Over the next 25 years, pulp and paper is headed for new records in employment, production, capacity, so it's worthwhile to examine some of the segments which constitute the industry.

Newsprint accounts for 60% of the total end production of the industry. It represented 53% of the $1.3 billion gross value of production last year. Production in 1955 amounted to 6.2 million tons and will increase to an estimated 6.5 million tons this year.

In the next three years, capacity will increase by about 1.3 million tons to 7.2 million tons. There may be over-capacity in 1957 or 1958 but mills will still operate at high levels.

By 1960, it is estimated Canada will supply 200,000 additional tons of newsprint to U. S. or 5,225,000 tons compared with 5,025,000 tons in 1955. This estimate made by the Newsprint Association of Canada to the Gordon Commission early this year now appears to be too low in the light of continuing strong demand from the U. S.

Overseas, prospective economic and population trends, plus current high level of newsprint use indicate rapidly rising demand in the future. Last year shipments amounted to only 725,000 tons, should reach 750,000 tons this year, jump 86% to 1,350,000 tons in 1960, 2,025,000 tons or 179% by 1956 from 1955 levels.

The Newsprint Picture

In the newsprint field, there are two basic trends evident in North America today.

(1) Aside from southern U. S. expansion, the future of the newsprint industry in the U. S. depends largely on recent developments in the use of hardwoods. Advances made at a mill in Maine may open the way for considerable expansion in that part of the country.

(2) Even though Canada may face tighter competition from supplying parts of the U. S. in the future, the overseas markets appear to offer a vast potential source of demand. Since their timber is limited they'll have to turn elsewhere for supplies and North America is the logical choice.

Another point which strengthens Canada's hand is the fierce competitive war in Europe today for wood supplies between newsprint producers and producers of other pulp and paper products. In recent years, newsprint has lagged in the competition. Non-paper pulps, fine paper grades and packaging materials have risen more rapidly than newsprint production in established industries in U. K. and Scandinavia. In fact, there is considerable newsprint capacity still classified as such which hasn't been used for newsprint for many years and is for production permanently devoted to other, more profitable lines of production.

Market pulps account for about 23% of the industry's production and are expected to increase to 5,046,000 tons in 1980 compared with some 2.4 million tons in 1955. The U. S. will continue to take about 75% of total shipments or approximately 3.7 million tons compared with 1.7 million.

The most notable trend in recent years in market pulp has been the fast expansion of sales into the U. S. Following some levelling off immediately after the war, consumption of all kinds of pulp exported to the U. S. have increased to their present level, three times that of 1939. Europe, which faces a possible deficit of 5.6 million tons of the 20 million tons which will be required by then, likely will take about 2 million additional tons of pulp from Canada by 1980—not far from present shipments to all sources from this country.

Book and Other Papers

While book, writing and groundwood papers represents only about 3% of all output, it is considered the jack-of-all-trades because of its many uses. The 1955 output of 292,000 should increase 11% to 325,000 tons by 1960, 66% to 485,000 tons by 1970 and 117% to 634,000 tons by 1980.

There are more than 500 grades of products in this section of the industry, ranging from half-tone news, through chemical wood pulp grades to grades made wholly from linen and cotton rags. These serve the needs of industry, education and culture — stationery, business forms, bank note currency, books and magazines.

Book papers constitute 33% of production in this classification and require a higher percentage of chemical pulps than groundwood papers. Fine or writing papers, such as ledgers and bond represent another 33% of output while miscellaneous grades constitute 6%. Groundwood papers—those containing more than 50% groundwood—take 27% of output.

In paperboard, production is expected to increase to 1,035,000 tons in 1960, 1,525,000 tons in 1970, and 2,180,000 tons in 1980 compared with 866,914 tons in 1955. This amounts to about 10% of industry's output.

The two main types of paperboard are container boards and boxboards. The product is mainly used in packaging although some is used in the manufacture of gypsum wallboards and some laminated into various thicknesses for use in building boards. Consumption in Canada in recent years suggests requirements are closely related to volume of goods distributed to consumers.

Wrapping and Other Papers

While wrapping paper represents only about 2% to 3% of the industry's output, the 12 producing mills in Central Canada and B. C. employ 16,000 workers in the mills and forests, have a capital investment of $60 million and produce goods and services valued at $51 million annually.

Since prewar, output has doubled and it is forecast there will be a further doubling from 256,000 tons to 515,000 tons over the next 25 years.

Paper sacks and bags account for over 55% of total output in Canada. Twenty percent goes into rolls of light and brown colored bags in which housewives' purchases are wrapped. The strong demand is indicated in first half results when output was up 15% at 146,002 tons compared with the same period of 1955.

Only 20% of all wrapping paper is for actual wrapping purposes. The remainder is used in these ways: 33% in manufacture of paper sacks of various kinds; 25% into grocery and other bags; 4% into gumming paper; 3% in envelopes; 15% in-

(Continued on page 51)

BRITISH AMERICAN
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LIMITED

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Engravers & Printers
OF
BANK NOTES • BONDS • STOCK CERTIFICATES
STAMPS • DEBENTURES AND CHEQUES

BRANCH OFFICES • MONTREAL & TORONTO

World Newsprint Output

Country	Average 1935-1339	1953	1954	1955	1956
Canada	3,336,786	5,721,296	5,984,207	6,180,000	6,500,000
U.S.A.	907,804	1,083,982	1,211,156	1,500,000	1,625,000
Argentina	0	8,800	28,000	20,000	20,000
Brazil	4,000	37,000	40,000	40,000	40,000
Chile	4,350	10,339	13,619	12,000	12,000
Peru	n.a.	neg.	neg.	neg.	neg.
Britain	961,800	675,242	685,800	694,000	728,000
Finland	436,125	484,164	492,863	602,000	704,000
Norway	205,500	172,309	173,961	175,000	193,000
Sweden	299,015	372,115	372,962	386,000	407,000
Austria	70,550	92,500	116,410	128,000	132,000
Belgium	51,820	61,040	56,690	64,000	80,000
France	397,000	371,000	422,000	427,000	432,000
German Republic	216,000	223,117	250,650	265,000	275,000
Netherlands	99,285	107,000	114,000	117,000	132,000
Portugal	2,000	1,761	1,699	7,000	13,000
Switzerland	34,500	60,000	66,000	66,000	66,000
Greece	0	0	0	0	5,000
Italy	74,500	128,045	140,900	155,000	175,000
Spain	27,600	33,000	44,000	55,000	55,000
Turkey	0	2,856	8,300	8,600	9,000
Yugoslavia	0	3,567	0	5,000	20,000
Israel	0	0	3,250	3,300	3,500
India	0	0	0	5,000	25,000
Taiwan (Formosa)	In. Japan	8,650	4,500	5,000	9,000
Japan	406,200	469,830	495,681	499,000	540,000
Rep. of Korea	In. Japan	3,944	6,597	9,000	11,000
Australia	0	48,700	78,861	83,000	83,000
New Zealand	0	0	0	22,000	67,000
Sub-Total	7,534,835	10,180,257	10,812,106	11,532,900	12,361,500
China & N. Korea	0	100,000	110,000	125,000	130,000
Russian Bloc	609,000	881,000	952,000	952,000	952,000
World Total	8,143,835	11,161,257	11,874,106	12,609,900	13,443,500

1955-56 estimated
Neg.: exact tonnage not available but known to be small.

CLARK 180° Rotating Paper Clamp Speeds Handling in Canada's Pulp and Paper Industry

Clark engineers have designed roll clamps to suit the many types of paper manufactured by the Canadian Paper Industry, large or small rolls, kraft or news print.

Clark Fork Trucks are sold and serviced by J. H. Ryder Machinery Co. Limited, the largest and most complete industrial truck sales and service organization in Canada.

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the salad that goes to school

Time was when school lunch was a mother's despair.

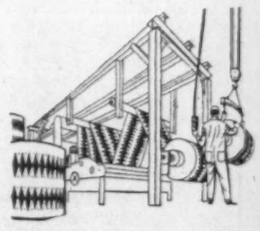
But today she can make health-laden lunches with all of the good things to eat that build young Canadians.

Waxed paper, the wrapping that keeps more kinds of food clean, fresh and tasteful, is one modern marvel that makes this possible. And not only school-children, but busy grown-ups too, in offices, shops and factories across the land, are learning how paper products help lock meal-table goodness in lunches.

With its new $4,500,000 paper converting plant at Richmond, B.C., Crown Zellerbach is keeping pace with the growing demand by Canadian families for waxed paper, for this versatile paper product will be the largest single item manufactured by this division.

Our other specially-treated papers, such as breadwrap, lockerwrap and butcherwrap, also contribute to better nutrition in a thousand different ways . . . protecting groceries, bringing meats into the home in clinical cleanliness, preserving perishables.

The waxed paper products of Crown Zellerbach, a paper-maker in Western Canada since 1917, help ensure pure food for Canadians . . . an important contribution to better living.



Crown Zellerbach paper helps the baking industry in its contribution to fresher, cleaner food for Canadians. Millions of loaves of bread sold in Western Canada come in breadwrap manufactured at our Richmond plant where machines print, wax and cut enough paper for 20,000 loaves every hour.

Forest products for better living

CROWN ZELLERBACH CANADA LIMITED
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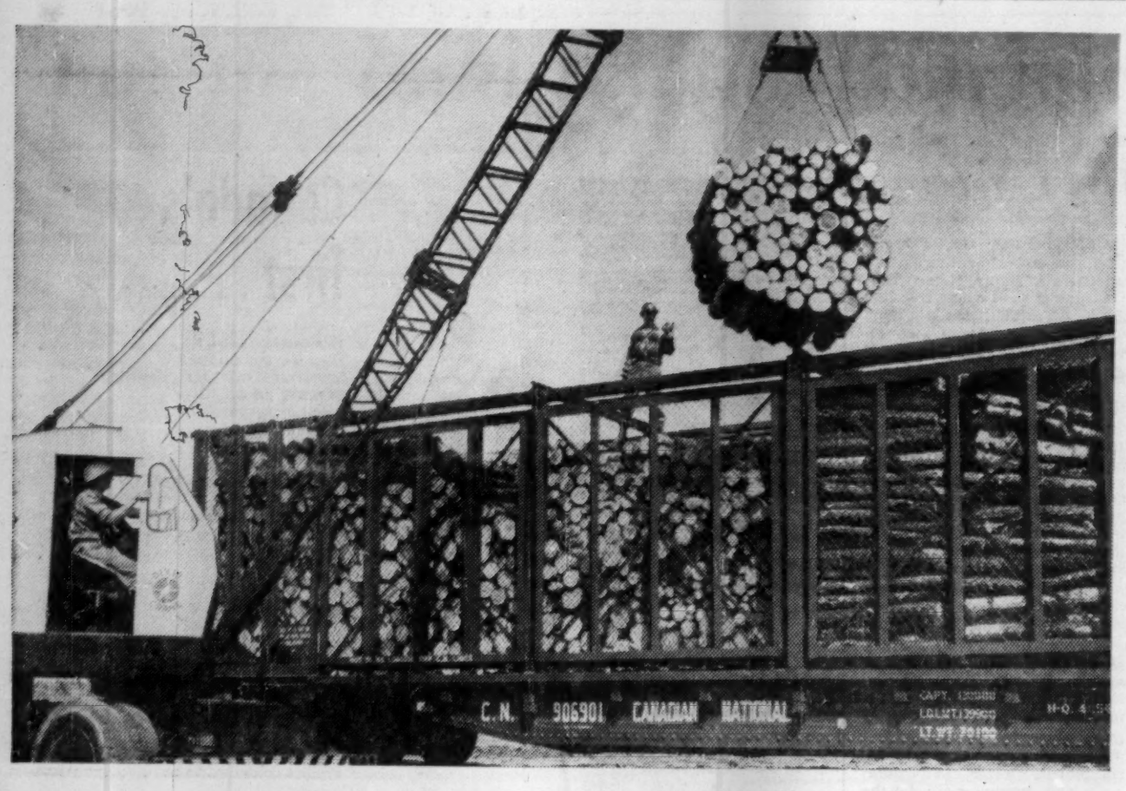
PAPER • PACKAGING PRODUCTS • LUMBER • PLYWOOD



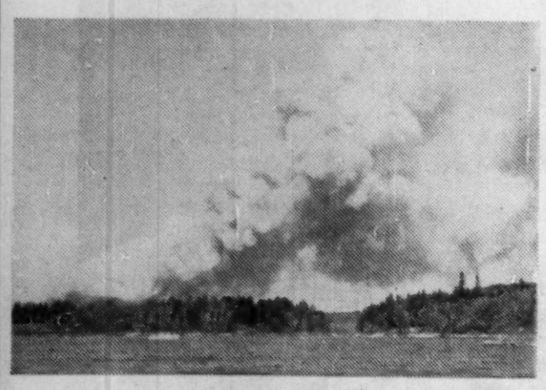
How CNR Pulpwood Car Works

CNR tests on this unique pulpwood freight car show it is coming up to expectations. At top, a crane loads it with 29 cords of soft pulpwood. In lower photo, the huge side gates are unlatched at the bottom, and logs which had been loaded lengthwise in the car tumble out. This cuts handling costs, manual labor. The doors either slide open or hinge from their mountings. The car, a full-scale prototype, was built on a modified flat car base.

SO EASY TO START — SO HARD TO STOP

About 80 per cent of forest fires would never start if people living in or visiting forest areas EXERCISED PROPER CAUTION.

Once started, a forest fire is extremely difficult and expensive to stop.



CARELESSNESS IS COSTLY

The people of Ontario pay a heavy price every year because somebody fails to observe common sense regulations.

EXERCISE CAUTION — PREVENT FOREST FIRES

ONTARIO

DEPARTMENT OF LANDS AND FORESTS

Hon. Clare E. Mapledoram, *Minister*

F. A. MacDougall, *Deputy Minister*

New Challenge in Industry

(Continued from page 50)

to waxed, waterproofed or sealed bags.

In building papers and building boards, production is expected to jump from about 225,000 tons annually to 390,000 tons by 1960, 570,000 tons by 1970 and 820,000 tons by 1980. Future demand will keep pace with the requirements of building construction in Canada. The product ranges from hardboards and heavy laminated boards to soft insulating boards, and various building papers and impregnated felts.

Tissue and sanitary papers represent less than 2% of production. In 1955, output was just over 100,000 tons which is expected to increase to 119,000 tons by 1960, 140,000 tons in 1965, 161,000 tons in 1970 and 203,000 in 1980. Volume has been increased by research and ingenuity in finding new uses and stimulating distribution and public demand. This will continue to be the case in the future.

The production includes fruit wrap, wrapping tissues, foil backing, cigarette papers, etc.

Capital Investment

The size of the industry today has evolved largely since the 1920s. In the period from 1921 to 1955 capital investment has increased to more than $2 billion or 430%, while production has jumped about 540% from 1,546,000 tons to more than 10 million tons and employment has increased by over 150% from 24,619 to 63,000.

Today there are 130 mills, double the number in 1920, and value of output is $1.3 billion, six times higher than the $236.4 millions in 1920. The importance of the industry is reflected in many other segments of the Canadian economy.

It annually pays: $200 million in transportation, $21 million for food, $29.6 million for hydro-electric, another $200 million in taxes. Mill purchases annually amount to $96 million including chemicals, wire mesh, fillers, minerals, woolen felts and dyes.

The industry is indeed big but there is no question it is going to get bigger. While total capital investment is $2 billion plus, to meet the needs of the next 25 years the industry will have to spend another $4 billion on capital account.

Since 1945 its total investment in new plant and equipment has exceeded $800 million, more than any other industry in the same period. At current costs and prices, the investment needed per ton of capacity to build a new pulp and paper mill is about $115,000.

To add just over 12 million tons of capacity annually—equivalent to an increase of 40,000 tons in daily capacity—would require an investment of $4.6 million. This figure may be too high:

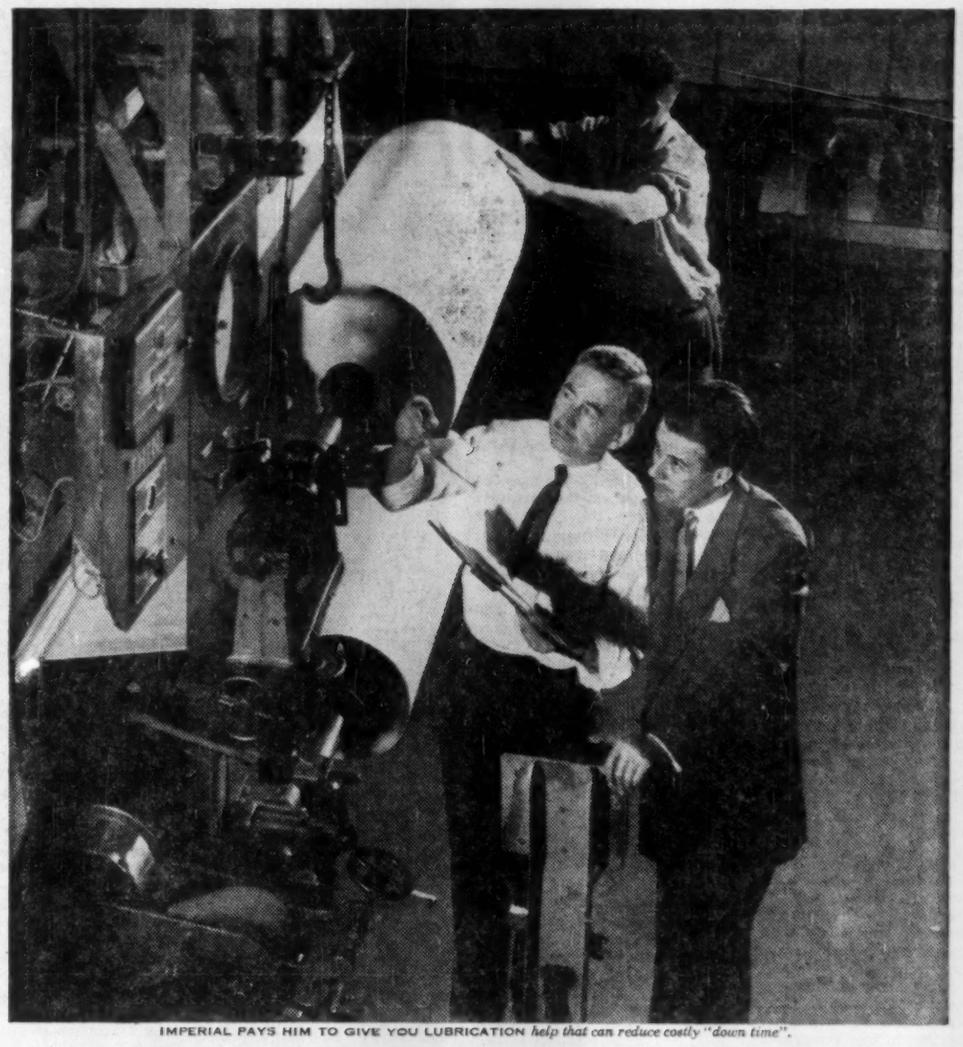
—It makes no allowance for capital savings through technical or design changes or for reduced capital costs usually achieved when capacity is added to existing units. The investment then may run to $4 billion.

—The figure doesn't take into account original or improvement investments in woodlands, power developments or townsites.

The 1980 production of main products is estimated at 21.9 million tons. Based on this output, per manhour work estimate is calculated to require roughly 156 million man-hours. On this basis and the present standard 40-hour week, there would be 75,000 workers required.

Estimates of man-hour production, per production employee have been estimated at approximately 168 lb. per manhour. This is expected to increase to 193.5 lb. per man-hour

(Continued on page 53)



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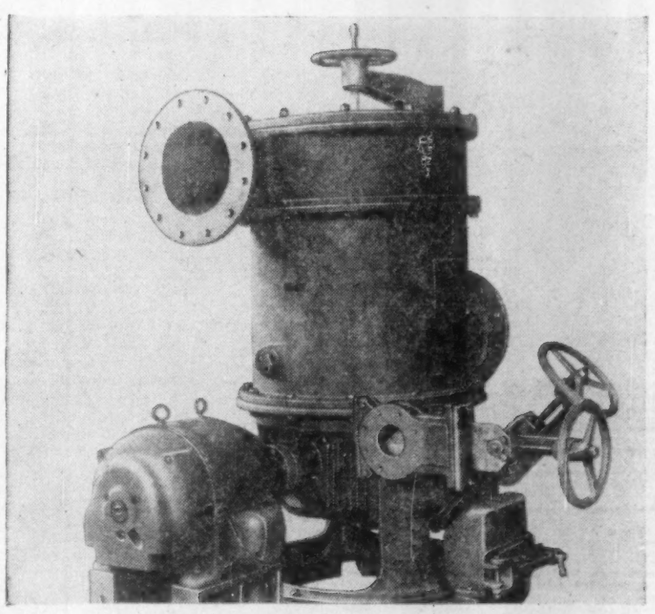
Phone or write your nearest Imperial Oil Sales Office for Engineering Service on lubrication—a member of Canada's largest staff of lubrication experts is located near you.

ALWAYS **LOOK TO IMPERIAL** FOR THE BEST

Final "screening" improves paper quality boosts output—gears aligned by TIMKEN bearings



SHARTLE DIVISION of Black-Clawson mounts their paper mill Selectifier Screen drive on Timken bearings, to hold gears in accurate alignment, prolong gear life.

PAPER mills install this 24-P Selectifier Screen just ahead of the Fourdrinier paper machine headbox or slice—and directly ahead of the liner and filler stock vats on the cylinder board machine—as a final cleaning and bundle breaking operation. Made by The Black-Clawson Company, Shartle Division, this unit improves sheet quality and increases productivity of the paper machine by eliminating harmful and wear-causing foreign particles from the paper stock. The inner and outer bearings on the pinion shaft, as well as top and bottom bearings on the gear shaft, are Timken bearings.

Timken tapered roller bearings hold shafts in rigid, accurate alignment, letting gears mesh smoothly, prolonging gear life. Tapered construction allows Timken bearings to take radial and thrust loads in any combination. And full line of contact between Timken bearing rollers and races gives them extra load-carrying capacity. Because they're geometrically designed to give true rolling motion—and precision-manufactured to do exactly that—Timken bearings practically eliminate friction. This means greatly reduced maintenance cost, longer bearing life and longer life for related parts, too.

Find out how Timken bearings make all kinds of machinery run better, last longer. When you build or buy machines for the paper industry, look for the trade-mark "TIMKEN" stamped on every bearing. The Timken Roller Bearing Company, Canton 6, Ohio, U.S.A. **CANADIAN PLANT:** St. Thomas, Ont. Cable address: "TIMROSCO".

This symbol on a product means its bearings are the best.

TIMKEN *Made in* **CANADA**

TRADE-MARK REG. IN CANADA AND U.S. PAT. OFF.

TAPERED ROLLER BEARINGS

FOR CANADIAN INDUSTRY

NOT JUST A BALL ○ NOT JUST A ROLLER ▭ THE TIMKEN TAPERED ROLLER ▭ BEARING TAKES RADIAL ◊ AND THRUST —◊— LOADS OR ANY COMBINATION —✳—

They're Searching for New Tomorrow In the Secrets of Wood's Chemistry

"The story of human advance is the story of the unconventional that has become commonplace, of the untried that has become routine, of the nonconformist that has become customary."

In the 1951 annual report of the Ford Foundation Fund for the Advancement of Education this statement was made. It applies in many fields.

In research, for example, there are both evolutionary and revolutionary phases. But chiefly, it is by determined effort, by quiet, painstaking, undramatic work that there is the introduction of new methods and equipment, leading to diversification and a growing array of new and improved products.

Such is the type of work of the Pulp and Paper Research Institute of Canada. Institute scientists are continuing to work on scores of investigations, ranging from means of improving germination of seeds in the forest to ways of getting stronger and cheaper packages for myriads of household products and improved pulp for the making of rayon, new plastics or chemicals.

Better Usage

Many studies are directed toward making better use of Canada's natural resources. Other research has to do with less expensive and faster ways of making pulp and paper and of improving their quality.

Such research is vital to Canada's largest industry to keep it competitive in world markets and thereby to assure the future of hundreds of thousands of Canadians who depend on this industry for their livelihood.

Graduate students at the Institute study such fundamental subjects as the chemical nature and behaviour of the materials Nature uses in making wood — cellulose, lignin, sugars and other carbohydrates, resins and so forth.

Some of the students have investigated the forces which cause cellulose fibres in a water suspension to mat together to form paper. Others study the physical and chemical nature of lignin, which may provide leads to commercial uses of this material which is now largely wasted.

During the Institute's history to date about 250 PhD. graduates in chemistry have been identified with its program. Although they have been primarily chemists, it is the Institute's intention to diversify the subject fields in which postgraduate students will receive assistance.

Doctorate Research

Already four men are doing doctorate thesis studies in chemical engineering on pulp and paper problems such as frictional losses when pulp flows through a pipe line and phenomena involved in the evaporation of solutions.

One important development from research at the Institute was discovery this year of a type of color photograph that can be printed cheaply and quickly in an amateur's darkroom. The cost would be 50c for a 4x5 in. print, would take only an hour from exposure to finished print.

The technique requires only standard, commercially-available, sensitized paper and standard chemicals. It does not require an intermediate transparency or a set of separation negatives.

Within a week after the June announcement of this new process, the Institute was flooded with letters. One letter from South Africa suggested that a company there would be prepared to act as agents, if the Institute wished to exploit the development commercially.

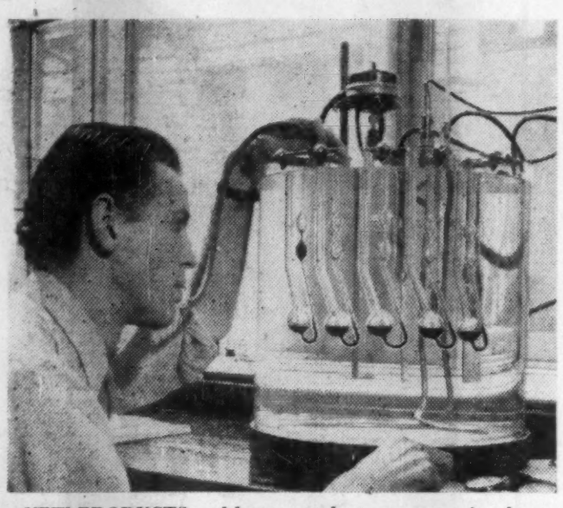
There were others from South Africa, England, Australia and elsewhere. But the Institute didn't try to protect this development by patents; rather, it released complete details.

How Institute Supported

The Institute is supported primarily through membership agreements with individual pulp and paper companies. Some 40 companies, representing more than 100 mills and about 90% of the total production in Canada are members now. Current operating budget is $1,250,000.

One program the Institute and several other organizations have been actively investigating concerns trying to find a means to substitute pulp made from chips for pulp made by grinding wood. If successfully developed this would mean a reduction in capital costs for new capacity because present grinders used in the groundwood process are quite expensive.

The most significant strides in this work have been taken by manufacturers of refiners



NEW PRODUCTS and better products are emerging from our pulp and paper mills because of research.

in the U. S. and the development may go into commercial use in the near future. One company, Bauer Brothers of Springfield, Ohio, now has a commercial pilot plant of 40 tons per day which was scheduled to start in August. It has been reported that several companies in the U. S. are actively interested in this work and may introduce such plants in their operations.

Sprout Waldron & Co., Muncie, Pa., has also developed this same process of mechanical pulping not involving grinders which it indicates is now commercially feasible. Several installations will be placed in operation within the next few months. In one Italian mill, production is expected to start before December this year of tissue paper from poplar wood chips treated in this manner.

Mild Treatment

In this mill, chips will be given a mild chemical treatment, would then be shoved through a refiner, and the pulp would be of a quality for tissue paper.

Developments such as this are considered to have many advantages aside from lower capital cost per ton of output. Labor and water needs are reduced. There is no stone grit in the pulp to wear down paper machine wires. Waste wood can be used as a low-cost raw material.

Output can be controlled. Size of building required is greatly reduced because there is no necessity for large grinders. Such a process would be economic for mills requiring only small tonnages of mechanical pulp which they now have to buy on the market — if and when it is available.

Another field of study at the Institute has to do with whole-tree logging. It has started on the design of a central plant to take the limbs and branches and bark of a whole tree and do the removal right in the bush.

It may likewise be possible to chip the trees and carry out other processes right in the woods. Here's how it would work:

The trees would be cut down, taken in bundles to a central point where a group of machines would carry out various operations mechanically. These operations would reduce the tree to a debarked form, perhaps utilize branches for chips. Needles might be put into a vat and distilled to produce pine oils for perfumes.

Left As Slash

At present, branches of the trees are left as slash; and they constitute potential forest fire hazards.

Ontario Paper Co., Thorold, Ont., is experimenting on a pilot scale at its Heron Bay, Ont., limits with whole tree logging. At present this is a hand operation but it is a step toward the ultimate objective of greater utilization of the trees.

If this project of mechanization were successfully developed by the paper companies and the institute, it wouldn't be applicable in every area. Its application would be only in certain favorable locations, dependent on the nature of the terrain and the forest. There is no one logging method that could be applied universally.

Looking some years ahead, it seems that revolutionary changes may come to the pulp and paper industry. Basic scientific knowledge exists for development of high-speed, continuous chemical pulping at atmospheric pressure. This could result in production of chemical pulps with small, compact equipment, lower in capital costs and located near to the source of wood supplies. Probably logs will be processed by machine to reduce them at high-speed to thin wafers, which would be passed through a chemical spray and onto a cooking device to convert them to pulp in five minutes or less. This would compare with the cooking cycle in present batch-type digestors of eight to 10 hours. This would be continuous pulping in a pipe. The wood would enter one end and the finished pulp would emerge at the other.

The final product might well have new and improved properties, by reason of the shortened exposure of the cellulose to degradation by action of chemicals and the almost complete absence of harmful effects now produced by the chipping of wood.

Subject Directory

Another aspect of the institute's work is in co-ordinating woodlands research within the pulp and paper industry. The institute issues a directory by subject of the research and experimental work in forestry done by Canadian pulp and paper companies, universities and others.

Already this covers nearly 300 projects. The directory is revised annually and is issued to students, professors, industry

(Continued on page 53)

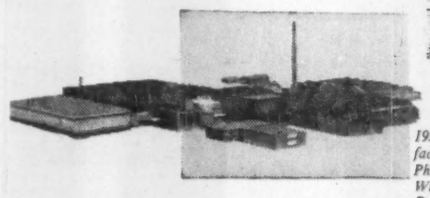
Sudbury, 1890

Canada's first . . .

Railwaymen, blasting for a line into Sudbury, uncovered a vast copper deposit in one of the oldest rock formations known to man. This discovery turned out to be the world's largest copper and nickel ore bed. And it was the beginning of a permanent mining industry in Ontario . . .

. . . It was also to provide a new and important market for the thriving, young Eugene F. Phillips Company. In 1889 the company began the manufacture of wire and cable in Canada. And in the years to follow Phillips continued to be a leader. In 1922, the company installed Canada's first copper rod rolling mill. Today, they have the most complete range of wires and cables in Canada.

1889—Original factory of the Eugene F. Phillips Company in Montreal.



1956—Present factory of Phillips Wires & Cables in Brockville.

Phillips
ELECTRICAL COMPANY, LIMITED
WIRES & CABLES
THE CANADIAN AFFILIATE OF THE B. I. C. C. GROUP
Head Office — Brockville, Ont.
MONTREAL • OTTAWA • TORONTO • HAMILTON • WINNIPEG
REGINA • EDMONTON • VANCOUVER

5423-R

ERCO chemicals . . . story of expansion for service

Growing since 1897 and still expanding today

Since its organization, ERCO has advanced with a long-term expansion programme to serve the chemical needs of Canadian agriculture and industry. Capacity of the original ERCO plant is being vastly increased . . . a large phosphorus plant built at Varennes, Quebec . . . a new sodium chlorate plant begun in Vancouver . . . a new phosphate plant in Hamilton.

Paralleling the expansion of production facilities has been a vigorous programme of product development to meet the challenging new needs of industry . . . expansion of ERCO technical services and broadening of shipping facilities to meet every demand.

Today, wherever chemical compounds are required, ERCO is equipped to make quick deliveries and staffed to provide expert on-the-job technical service on the use of these products. And as Canada continues its impressive rate of growth, ERCO's expansion programme will continue to keep pace with it!

The industries we serve: AGRICULTURE, BAKING, BEVERAGE, CERAMIC, COSMETIC, DAIRY, DETERGENT, LEATHER, METALLURGICAL, PAINT AND VARNISH, PETROLEUM, PHARMACEUTICAL, PULP AND PAPER' SUGAR REFINING, TEXTILES.

ERCO CHEMICALS

ELECTRIC REDUCTION
SALES COMPANY LIMITED
137 Wellington St. W., Toronto
2075 Mansfield St., Montreal

NORTH VANCOUVER
Site of ERCO's new $5,000,000 sodium chlorate plant. Scheduled to begin operation late in 1956 or early in 1957, it will enable ERCO to provide even better service for the ever-growing pulp and paper industry in British Columbia.

PLANTS
SALES OFFICES

HAMILTON
Work has begun on a new combination of ERCO plants to supply the phosphoric acid requirements of industry and agriculture in this area. Phosphorus will be processed by the most modern methods in producing chemical compounds for use in many industries. Sulphuric acid and "wet process" phosphoric acid plants will be installed in parallel.

BUCKINGHAM
Greatly expanded since its modest beginning in 1898, this ERCO plant on the Lievre River in Quebec now occupies 57 acres and employs more than 500 people. Its principal products include red and yellow phosphorus, phosphoric acid, sodium and calcium phosphates, sodium and potassium chlorate, phosphorus sesquisulphide, ferrophosphorus, and several trade name products.

VARENNES
Located on the South shore of the St. Lawrence River near Montreal, this plant can make use of economical ocean transportation for exporting ERCO products to world markets. The 122-acre site provides ample space for expansion and new production facilities will be installed as demand continues to grow.

For the Industry Challenges

(Continued from page 51)

in 1960, 237.5 lb. in 1970, and 281.5 lb. in 1980.

Although seasonal logging can be expected to continue as the main feature in woods operations east of the Rockies, several factors can be expected to smooth out this typical pattern somewhat. Across Canada, year-round logging has been on the increase for some years and this has resulted in some labor economies, chiefly as a result of reduced turnover. Mechanization, apart from its direct effect on productivity, will further this trend by overcoming problems of difficult terrain.

Forest Yield

Canada's forests can provide the necessary raw materials to sustain the doubled production without exhausting the reserves of wood or impairing the capital assets in natural resources of future generations.

Still, increasing the yield on the forest lands of this country is the prime objective of everyone. Although there is still much to learn about silviculture and sound forest management, there is already sufficient technical knowledge to further this objective.

Policy obviously will be aimed at maximizing in perpetuity employment, income and cash returns from forest investment, t also ensure watershed protection, provide recreational facilities and sustain wild life.

Along these lines, policy statements of various groups associated with the industry generally make these points:

—Development of fire protection to a degree that forests may become commercially insurable risks. This means the building of access roads for only in this way can protection be assured.

—Forest inventories should be taken to include complete and continuing records of growing stock, rates of growth, capacity of the soil to grow trees and rate of depletion.

—A classification of the land and dedication of land to its proper use. This is suggested as being largely a question—a controversial one too—of earmarking crown lands for agricultural or forestry use.

—Reclamation of denuded forest lands and rehabilitation of the private woodlot.

The long-term program, it is felt, should have as its objective the development of forest research working plans, integrated operations and increased sustained yields.

The problems are difficult but not insurmountable and certainly there is good reason to attack them successfully to meet the needs and opportunities of the future.

Technical Improvements

The 20th century revolution in mass production and merchandising along with an expanding use of pulp and paper products for culture has formed a firm foundation for the industry's strength and vigor.

On the one hand, there has been a growing demand because of rising populations, higher literacy and improved educational standards. On the other, the needs for packaging, business, communication and advertising stimulated further needs for different types of production.

Tomorrow — which is almost upon us—there will be introduction of new devices referred to as "automation." The process which it seeks to describe has been going on for years within the industry.

There is no doubt that all the automatic devices and designs that can be conceived will be required if Canada is to supply the probable demands in store, to do so efficiently and at the low cost needed to maintain and expand its position in world trade.

In 25 years, the pulp and paper industry will not only be larger but more technically complex. The problem will be to train men in the technical skills required for its operations. The needs for scientists, engineers, trained operators and maintenance men will rise more rapidly than the growth of total personnel would suggest.

These people will be vital to maintaining Canada's high standard of living, largely dependent on international trade and achieved only because of the world's pressing need for our natural resources.

That is why the pulp and paper industry of today is planning and working now to meet the growing needs of tomorrow.

Capacity Grows

Here are announced new capacity projects in North America. These are in addition to 1956 capacity of 6,243,000 tons for Canada and 1,625,000 for U.S.A.

New Machines

CANADA

			Expected	Added Ann. Cap. (short tons)
1. Ontario-Minnesota	Kenora	No. 10	Jan. '57	65,000 net (Total 90,000)
2. Powell River Co.	Powell River	No. 9	end '56	90,000
3. Richmond	Bromptonville	No. 3	end '56	40,000
4. Elk Falls	Duncan Bay	No. 2	mid '57	30,000 net (Total 50,000)
5. MacMillan & Bloedel	Port Alberni	No. 1	mid '57	100,000
6. Great Lakes	Ft. William	No. 3	end '57	90,000
7. Abitibi	Ft. William	No. 3	end '57	100,000
8. Great Lakes	Ft. William	No. 4	mid '58	100,000
9. MacMillan & Bloedel	Port Alberni	No. 2	end '58	100,000
	Total (for 3 years)			715,000

U.S.A.

1. International Paper	Mobile, Ala.		Sept. '56	82,000 net (Total 115,000)
2. Bowater Southern	Calhoun, Tenn.	No. 3	end '56	95,000
3. Southland	Lufkin, Tex.	No. 3	mid '56	40,000 net (Total 70,000)
4. St. Croix	Woodlands, Me.	No. 3	mid '57	45,000
5. Coosa River	Coosa River, Ala.	No. 3	end '57	122,000
6. Allied Paper	Colorado	No. 1	end '57	30,000
7. International Paper	Pine Bluff, Ark.		end '57	130,000
8. Hudson Pulp & Paper Co.	Palatka, Fla.		end '58	100,000
	Total (for 3 years)			644,000
	Total North America (for 3 years)			1,359,000

New Capacity

CANADA

		Suggested	Annual Capacity (short tons)
1. Maritime P & P Co.	Lepreau, N. B.	Early 1959	150,000
2. Donohue Bros.	La Malbaie	?	75,000
3. Celgar	Arrow Lakes, B.C.	?	100,000
4. Kitimat P & P Co.	Kitimat B.C.	?	125,000
5. A. Company	Newfoundland	?	150,000
6. A. Company	Matagami, P.Q.	?	150,000
7. Hearst Pub. Co.	Sheet Harbour, N.S.	?	100,000
			850,000

U.S.A.

		Suggested	Annual Capacity (short tons)
1. Bowaters	Calhoun, Tenn.	?	100,000
2. Georgia Pacific	Alaska	?	175,000
3. Inland Empire	Millwood, Wash.	?	100,000
4. National Paper Corp.	Carbondale, Pa.	?	75,000
5. Powell River Co.	Southwestern U.S.A.	?	100,000
			550,000

Speedups

Expected 1956	
Abitibi	30,000
Consolidated Paper	75,000
Eddy Paper	7,500
	112,500
Expected 1957	
Abitibi	30,000
Bowater Nfld.	35,000
Cdn. Int. Paper	55,000
	120,000
Expected 1958	
Abitibi	30,000
Consolidated Paper	55,000
Crown Zellerbach Canada	60,000
Howard Smith	12,500
St. Lawrence	40,000
	197,500

New Capacity

	New Machines	Speed-ups	Total
1956	195,000	112,500	307,500
1957	320,000	120,000	440,000
1958	200,000	197,500	397,500
Total new capacity			1,145,000

N.B.—New machines in some cases may operate at below total capacity initially. By end of 1958, if in full operation, they should mean about 50,000 tons more. There are some programs which may go ahead faster than indicated to date and allowance of 100,000 tons made. Total capacity then would be 1.3 million tons at end of 1958.

In U. S., in addition to 644,000 tons through installation of new machines, an estimate is made that a further 65,000 tons will be available by machines moving up to operate at design capacity. An extra 100,000 tons is also allowed for speedup, etc., which would make approximate new installed capacity at the end of 1958, 800,000 tons.

The Canadian and U. S. total combined then would indicate additional capacity of 2.1 million tons at Jan. 1, 1959.

They're Hunting New Wealth In Wood's Chemical Secrets

(Continued from page 52)

officials, and others doing work in this field. This leads to cross-fertilization of ideas between companies, universities, and companies and government.

Another field in which the pulp and paper industry is working is on the utilization of sawmill waste for pulpwood. There has been a notable trend in Eastern Canada more recently to utilize waste wood from lumber operations for pulpwood.

While this has been under way for a number of years, it has come into more prominence recently. The Forest Products Laboratories of the Forestry Branch of the Department of Northern Affairs and National Resources has compiled a major summary on this work.

In B. C. prior to World War II there were only five mills making chemical pulps and they used only forest wood in the form of logs. The start of an extensive program of pulpmill construction with some of the mills being installed to use both forest wood and mill waste in the adjoining State of Washington in the early 1930s resulted in three or four B. C. sawmills shipping selected mill waste to these mills — either as bark wood or chips.

Since the war, B. C. has seen a great expansion in its pulp industry—with good integration between sawmill and pulpmill operation. An indication of the tremendous utilization of chips from formerly wasted wood now developed in the coast region of B. C. can be seen in the fact that in 1954 B. C. Lumber Manufacturers' Association mills delivered 860,000 units of chips to pulp mills, enough for 370,000 tons of chemical pulp.

In Eastern Canada such operations are as yet limited with economics still the main controlling factor in determining what mill waste can be profitably used for pulpwood.

Many problems remain to be solved before full use is possible from utilization of mill waste for pulpwood although it is a valuable source of cellulose. Complete utilization must largely depend on supply and demand.

The sawmill must be able to provide a steady and dependable supply of chips or mill waste of a quality satisfactory to the pulp mill. The pulp mill, in turn, has the responsibility of ensuring that its wood standards are not unnecessarily high. The more sawmill waste that is utilized as pulpwood the more forest wood is conserved for the future.

Another important stride was made this year by the Pulp and Paper Research Institute with the announcement that a new $2,250,000 building to house its activities would be built in Pointe Claire, Que.

Construction by the Government of Canada of the new labs will also assist postgraduate education and research in various fields of science and technology.

The institute's history traces back to 1913 when it began as a branch of the Government's Forest Products Laboratories. It later became a joint enterprise devoted to the advancement of the pulp and paper and allied industries and for the training of McGill University graduate students to receive Ph.D. degrees from the university for fundamental research on subjects of interest to the industry.

The institute now has a staff of about 150 together with some 21 graduates in training. It presently occupies a building erected by the pulp and paper industry in 1927 which will be retained as part of the expanded facilities when the new Pointe Claire building is completed in 1957.

Many companies in the indus-

(Continued on page 54)

"Shorty"

He was one of our employees, over 75 years ago, when the company was known as Dodge Pulley Works. To symbolize the kind of Canadian craftsmanship that had made Dodge the world's largest manufacturer of wooden pulleys, plaster statues of "Shorty", like this one, were created and sent to many Dodge customers.

Dodge has since joined with other Canadian companies to form United Steel Corporation. The fact that it has continued to grow, like Canada itself, is a direct result of uncompromising adherence to the standards of craftsmanship that this statue of "Shorty" represented.

It's evident today in the skilled service Dodge men provide on *mechanical power transmission equipment* requirements or the way they tackle a tough *materials handling* problem and come up with the right answer and the right equipment.

In fact, this same quality craftsmanship, and pride in a job well done, is yours in *all* the products of United Steel Corporation Limited.

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CORPORATION LIMITED
LONDON · KIRKLAND LAKE

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CANADIAN MEAD-MORRISON DIVISION
STANDARD STEEL CONSTRUCTION CO.
LONDON STEEL CONSTRUCTION CO. LTD.
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SUBSIDIARIES with Sales Offices in Peterborough, Ont., Winnipeg, Man., Calgary, Edmonton, Alta.
SALES AGENTS in Halifax, N.S., St. John's, Nfld., Vancouver, B.C.

Industry Flexes New Muscles As Expansion Shifts to High

In August this year a bulldozer crawled over a black-topped area bigger than a football field spotted with huge mounds of "noodle" pulp . . . nearby, a mountain of wood chips . . . overhead, a more than mile-long conveyor system.

These scenes symbolized completion of the first stage of the $29-million expansion program of **Elk Falls Co.** and the start up of its new $15-million kraft pulp mill at Duncan Bay on Vancouver Island. They symbolized too the general expansion in the industry throughout Canada.

For B.C., it was the fourth mill for pulp to be built on Vancouver Island, the third since World War II. For Elk Falls, a subsidiary of **Crown Zellerbach Canada,** it meant moving into the second stage of expansion involving a $14 million outlay.

This program calls for installation of a new $7.5-million combination kraft and newsprint machine; a 175-ton per day bleach plant; four additional grinder for groundwood production and construction of a saw mill and two additional digesters. The present 400 tons of unbleached kraft pulp output will be boosted to 500 tons per day of bleached and unbleached kraft.

From 25 small sawmills on Vancouver Island and the Lower Mainland chips are barged to the site to provide the major source of supply for the new kraft mill. Probably about 100 tons of the ultimate 500 tons daily capacity initially will be sold in Canada. The remainder will be shipped in bulk form by tanker to the Crown Zellerbach plant at Antioch, Cal., for conversion to kraft bag, wrapping, and paper grades.

When these projects are completed, they will result in a major development toward an integrated forest industry at the Duncan Bay site where the kraft pulp mill is adjacent to the Elk Fall's four-year-old newsprint mill. They will also provide for what is described as the best end use of sawlogs, pulp logs and sawmill waste at one mill.

New Concept

It wasn't an accident but ingenuity, typical of the entire industry, and development of a unique method of waterborne transport to help meet competitive conditions in the U.S., that prompted location of the new mill on Vancouver Island.

A specially built bulk pulp "tanker," the $5 million S.S. Duncan Bay, will carry the pulp in wet "noodle" form to the Crown Zellerbach mill in California. Transportation economies are achieved through quick loading and unloading, providing for a minimum turnaround time of the carrier at both terminals.

The method of handling of bulk pulp in wet noodle form is a new concept in the industry.

Ordinarily, pulp exported to the U.S. by British Columbia producers is shipped in dry or baled form. It must then be reconverted to wet pulp at paper mills of the U.S. customers. However, two mills in Eastern Canada export wet pulp to the U.S. by pipeline.

The first load of 4,000 tons of air-dry pulp (about 12,000 tons wet) was scheduled for shipment early this month. The ship is owned by **Universe Tankships Inc.,** an affiliate of **National Bulk Carriers Inc.** of New York and has been chartered by Crown Zellerbach for the bulk pulp movements.

Meanwhile at the Ocean Falls mill, speedup of the No. 3 machine (wrapping grades) increased annual capacity by about 5% and machine tonnage,

(Continued on page 55)

The Export Picture in Detail

	Total Exports		To U.S.A.		To United Kingdom		To Other Countries	
PULP —	Tons	Value	Tons	Value	Tons	Value	Tons	Value
Kraft	892,138	$113,023,434	761,592	$ 97,813,971	61,190	$ 7,248,042	69,356	$ 7,961,421
Bleached	670,445	90,940,805	601,121	81,099,525	33,768	4,831,529	35,556	5,009,751
Unbleached	221,693	22,082,629	160,471	16,714,446	27,422	2,416,513	33,800	2,951,670
Sulphite — Bleached	787,125	117,319,377	547,033	81,483,850	104,053	16,308,625	136,039	19,526,902
Dissolving	330,132	58,417,937	195,731	35,747,941	56,813	10,478,711	77,588	12,191,285
Paper Grades	456,993	58,901,440	351,302	45,735,909	47,240	5,829,914	58,451	7,335,617
Sulphite — Unbleached	371,705	42,532,861	289,443	32,939,145	71,877	8,467,324	10,385	1,126,392
Strong	242,062	27,280,135	215,864	24,498,138	17,191	1,798,896	9,007	983,101
News	129,643	15,252,726	73,579	8,441,007	54,686	6,668,428	1,378	143,291
Total Chemical	2,050,068	$272,875,672	1,598,068	$212,236,966	237,120	$32,023,991	215,780	$28,614,715
Mechanical	261,995	18,188,487	217,222	15,345,968	43,455	2,790,107	818	52,412
Bleached	41,882	3,065,866	41,609	3,051,772	82	6,064	191	8,030
Unbleached	220,113	15,122,621	176,113	12,294,196	43,373	2,784,043	627	44,382
Other Pulps	41,288	5,873,683	41,132	5,847,618	.....	.....	156	26,065
Screenings	11,882	366,227	11,882	366,277	.....	.....	.....	.....
Chemical	5,972	222,949	5,972	222,949	.....	.....	.....	.....
Mechanical	5,910	143,278	5,910	143,278	.....	.....	.....	.....
Total Miscellaneous	315,165	$ 24,428,397	270,736	$ 21,559,813	43,455	$ 2,790,107	974	$ 78,477
TOTAL PULP	2,366,133	$297,304,069	1,868,804	$233,796,779	280,575	$34,814,098	216,754	$28,693,192
NEWSPRINT PAPER —								
Standard	5,763,167	665,876,987	5,027,767	578,322,418	286,343	33,013,480	449,057	54,541,089
Mutilated	16,484	1,143,581	15,293	1,073,547	1,171	67,944	20	2,090
TOTAL NEWSPRINT	5,779,651	$667,020,568	5,043,060	$579,395,965	287,514	$33,081,424	449,077	$54,543,179
OTHER PAPER —								
Wrapping—Coated	119	72,095	71	43,105	*	33	48	28,957
Wrapping—Kraft	14,218	2,479,073	6,577	1,060,963	2,601	500,498	5,040	917,612
Wrapping—n.o.p.	3,940	655,097	2,406	305,157	884	185,455	650	164,485
Book	33,195	5,917,168	27,453	4,463,487	132	37,394	5,610	1,416,287
Bond & Writing	8,441	2,350,075	87	27,579	372	114,803	7,982	2,207,693
Paperboard—n.o.p.	40,442	4,971,027	17,798	2,074,456	21,183	2,657,807	1,461	238,764
Roofing & Building	722	50,655	266	17,581	23	5,518	433	27,556
Building & Insulating Board	47,460	4,279,996	38,140	3,524,627	5,563	447,708	3,757	307,661
Waste Paper	42,356	1,716,952	41,548	1,667,418	252	22,012	556	27,522
Pulpboard for Wallboard	14,307	1,477,864	14,031	1,440,366	.....	.....	276	37,498
Tissue	1,031	285,551	.....	.....	*	77	1,031	285,474
Toilet	4,109	763,713	1	237	1	207	4,107	763,269
TOTAL OTHER PAPER	210,340	$ 25,019,266	148,378	$ 14,624,976	31,011	$ 3,971,512	30,951	$ 6,422,778
PAPER PRODUCTS — (a)								
Bags, Boxes & Cartons	.....	374,902	.....	63,248	.....	646	.....	311,008
Bags	.....	235,467	.....	16,937	.....	.....	.....	218,530
Boxes & Cartons	.....	139,435	.....	46,311	.....	646	.....	92,478
Hangings or Wall Paper	.....	553,949	.....	481,323	.....	1,798	.....	70,828
Hanging, not Printed	.....	390,492	.....	329,254	.....	60,666	.....	572
Writing—n.o.p.	.....	85,661	.....	14,697	.....	305	.....	70,659
Handkerchiefs—Tissues	.....	23,148	.....	2,650	.....	284	.....	20,214
Napkins & Towels	.....	35,586	.....	483	.....	357	.....	34,746
Blank Books	.....	116,094	.....	500	.....	.....	.....	115,594
Paper—n.o.p.	.....	205,266	.....	103,260	.....	14,666	.....	87,340
Other Paper Products	.....	414,045	.....	236,583	.....	1,276	.....	176,186
TOTAL PAPER PRODUCTS	.....	$ 2,199,143	.....	$ 1,231,998	.....	$ 79,998	.....	$ 887,147
GRAND TOTAL	8,356,124	$991,543,046	7,060,242	$829,049,718	599,100	$71,947,032	696,782	$90,546,296

* Less than half a ton.
(a) Weight of paper products is unavailable.
n.o.p.: Not otherwise provided for.
Source: Dominion Bureau of Statistics.

Canada's pacemaker

Each day, pulp and paper creates more than $3½ million of new wealth for Canada. In value of production, in exports, in employment, in wages paid, and in investment, it leads all industry. Its purchases of goods and services are unparalleled in Canadian industrial life. Pulp and paper continues to pace Canada's expanding economy.

PULP & PAPER INDUSTRY of CANADA

They're Hunting Wealth in Wood

(Continued from page 53)

try are actively engaged in research. **Consolidated Paper** Corp., to name only one, this year announced that it has experimented successfully with the manufacture of "high yield" sulphite pulp.

It suggested this has resulted in development of a process yielding about 30% more pulp from a given quantity of wood.

It plans to convert its three mills which produce this type of pulp and has already started on its Belgo mill. It estimates that when these three mills are equipped to operate by this process there will be an annual savings of about $2 million.

Enlarge Facilities

To enlarge and improve its research facilities, enlarge the research staff, and to co-ordinate research activities more closely with the operating divisions, a new research centre will be built at Grand'Mere adjacent to Consolidated's headquarters of the woodlands, manufacturing and engineering departments. This will include laboratories, workshops, offices, conference rooms and a large assembly room to accommodate the woodlands and manufacturing operating staff meetings.

Consolidated's research activities have these principal goals: To lower operating costs; to improve quality of products; to develop new products from raw materials and to utilize more fully the waste which is available.

MARKET COMMENT

The informed opinion of men experienced in market analysis is given regularly in this investment feature. For profit add their viewpoint to yours. You get them in

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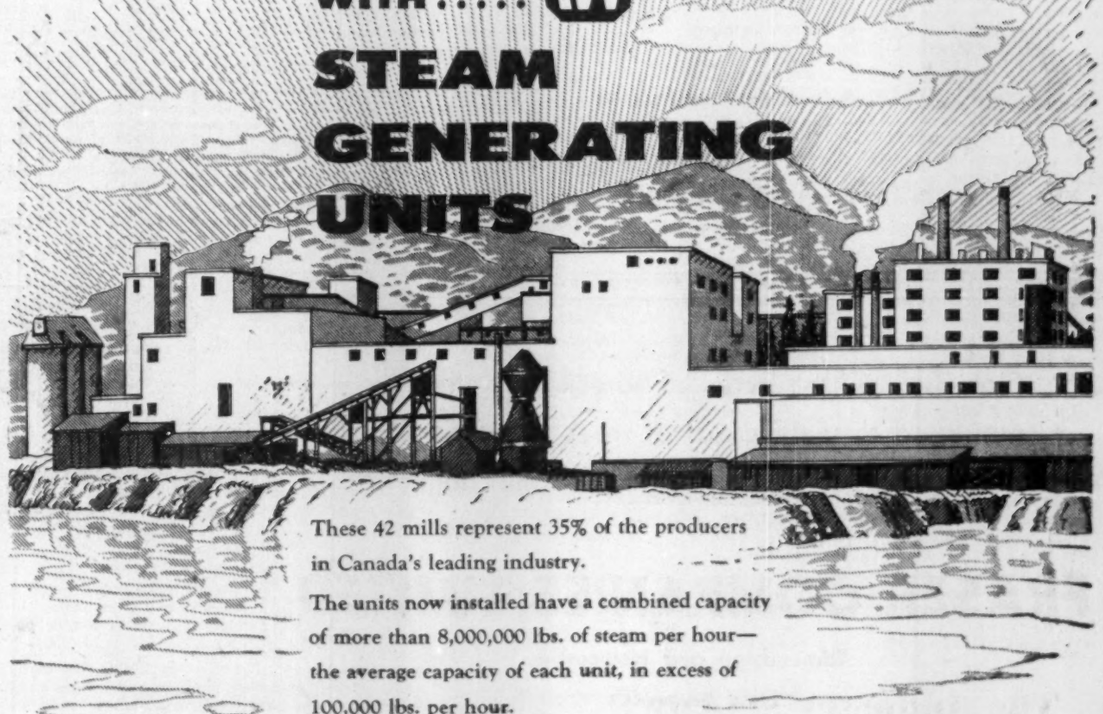
42 CANADIAN PULP AND PAPER MILLS ARE EQUIPPED WITH FW STEAM GENERATING UNITS



These 42 mills represent 35% of the producers in Canada's leading industry.

The units now installed have a combined capacity of more than 8,000,000 lbs. of steam per hour—the average capacity of each unit, in excess of 100,000 lbs. per hour.

Many other mills have FW Condensers, Steam-jet Air Ejectors, Heating Towers, Accumulators, etc.

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Expansion Shifts Into High

(Continued from page 54)

2,200 tons per year, effective in August, 1956.

At Richmond, B.C., Crown Zellerbach Canada's new converting plant is in full production providing an integrated centre for the manufacture of a complete line of paper boxes and assorted consumer products. The $4.5-million plant started operation last May and will give 95,000 sq. ft. against 50,000 sq. ft. in the old plant.

Meeting World Demand

That's just one company. In Canada's largest industry there are some 130 mills of many companies and most are actively interested in or under way with expansion to meet the world demand for their varied products.

Great Lakes Paper Co. has plans for capital expenditures of almost $35 million over the next few years. The present two newsprint machines will be supplemented by a third of 90,000 tons annual capacity planned for production July 1, 1957, and a fourth machine of approximately 110,000 tons annual capacity is scheduled for operation by July 1, 1958.

Beyond this expansion, Great Lakes has a 1956 program which calls for construction of an entirely new mill, on its present site at Fort William, for the manufacture of wood cellulose products other than newsprint.

The new mill will be specially designed to make use of a wide variety of wood species, not only the spruce and balsam which it is already using but other species, such as jackpine, poplar and birch, which are available in good quantity but which are largely wasted in present production.

Minnesota & Ontario Paper Co. has started construction of new newsprint facilities at Kenora, Ont. Estimated cost is approximately $17 million with completion date Jan. 1, 1957. This will substantially double the present capacity of the mill.

Fraser Companies Ltd., Edmundston, N.B., last year started work on its program for additional bleaching capacity of sulphite pulp at its plant in Edmundston to alleviate the present overloading of the system, to effect economies and to provide for increased requirements in the future. It started construction of an addition to the Edmundston steam plant to permit the installation to be in operation by late 1957 or early 1958.

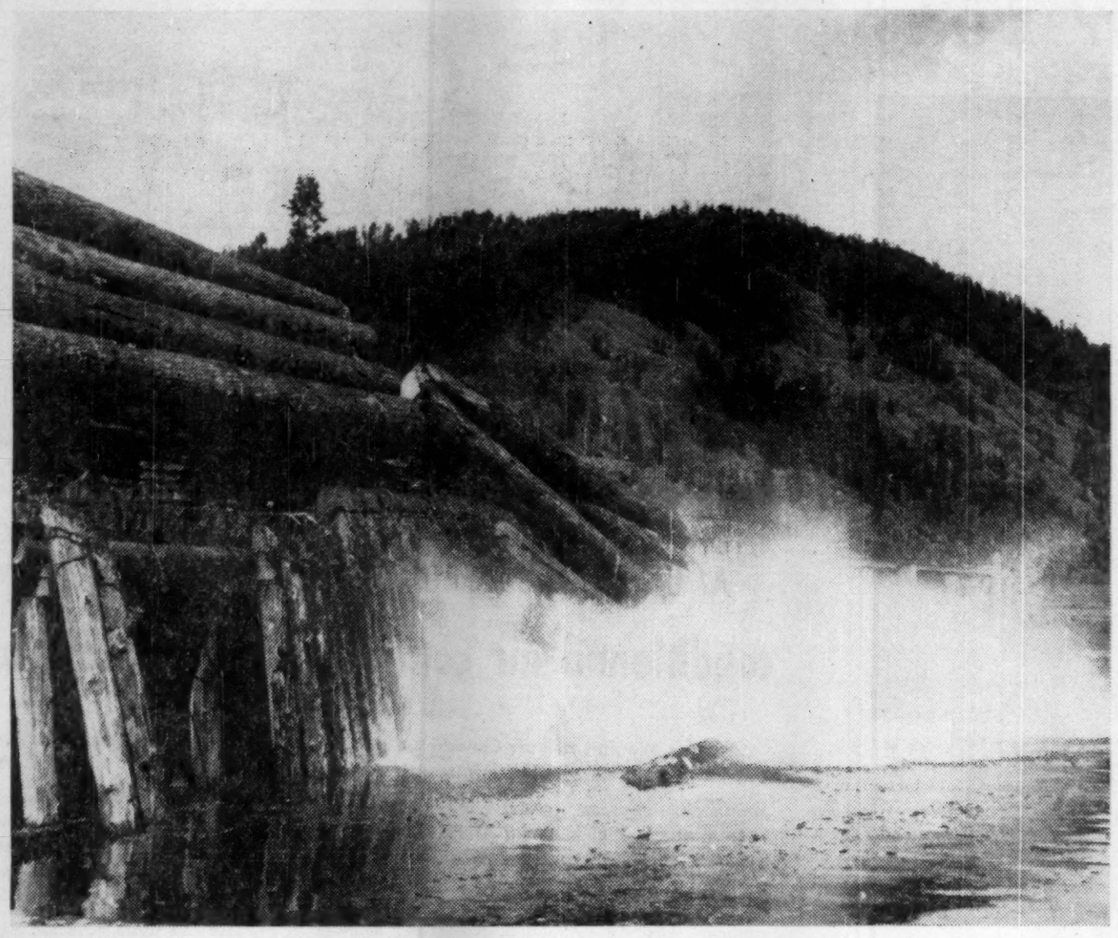
At Madawaska, a new electrical drive and ventilation system on No. 2 paper machine, a new suction pickup attachment on one, possibly two paper machines, and installation of batteries of centri-cleaners on some of the other paper machines is included in its program, as well as continued revisions and additions to electrical distribution system necessitated by both obsolescence and increased power requirements.

Rolland Paper Co. has under way a $4,650,000 expansion and improvement program. The program includes a modern fine paper making machine to be installed in a new building at the St. Jerome mill with a production capacity of about 15,000 tons annually. It is expected that this machine will be in operation in the middle of 1957. It completed a new water treatment plant of a capacity of four million Imperial gallons per day during the spring of this year.

Mersey Paper Co., now a member of the **Bowater** organization, plans to increase annual newsprint production to 165,000 tons per year. Present estimates indicate mill will produce 140,000 tons this year. The program will cost $4.5 million and involve speedup of two newsprint machines. It also has plans for a pulp mill of 100,000 tons annual capacity.

Building Products Ltd. has a major expansion started at its Pont Rouge plant which will increase board capacity, and cost $1.5 million. It will enable the company to manufacture decorative and acoustical types of board as well as all of the types which it now manufactures.

Project will be completed in the early months of 1957. Company recently initiated in Canada, it says, the treatment of insul-board products, including insulated sidings, with copper pentachlorophenate for protection against rot, mildew and termites.



PULP AND PAPER, in addition to being Canada's richest single industry, is one of our most picturesque. Here logs tumble into the water in a scene worthy of a painter.

St. Lawrence Corp. is in the process of expanding annual production of newsprint at its Trois Rivieres and Dolbeau mills by 40,000 tons through speedup of existing paper machines and installation of auxiliary equipment necessary to make this possible. Cost of this work is estimated to be $9.4 million with completion scheduled for 1958. Further expansion in kraft capacity is under consideration.

Powell River Co., B.C., has increased newsprint capacity this year through speedup of machines. The present expansion program includes installation of No. 9 machine of the latest high-speed design which will produce 90,000 tons per year.

This development program, which includes ancillary plant and equipment will cost an estimated $20 million and is scheduled for completion in December, 1956. Newsprint output last year amounted to 392,000 tons.

MacMillan & Bloedel Ltd., Vancouver, B.C., has under way a $65-million expansion program at its Alberni Pulp and Paper division. Productive capacity of unbleached pulp after expansion is completed will be 500 tons per day, part of which after bleaching will provide the chemical pulp requirements for the newsprint furnish, part for the coarse paper and board machine and the remainder for market pulp. The newsprint machine will have a capacity of upward of 600 tons per day and the board machine approximately 180 tons per day.

There are countless other projects of major companies, like **Consolidated Paper, Canadian International Paper** and **Bowater's, Newfoundland.**

Not only are efforts directed to expansion along these lines but companies are actively engaged in search and development of new techniques in wood or mill or new products which assist operations.

In the case of **Bathurst Power and Paper Co.**, current operations continue to reflect the introduction of past improvements in techniques and products. Such improvements include the discovery and introduction in 1945 of a new process producing a high yield from softwood and in 1952 a new method of cooking in digesters. The new cooking process is a patented process and exclusive to the company.

In 1951, Bathurst introduced the first continuous semichemical process in Canada to produce a more rigid sheet of corrugating board than had been manufactured previously.

This specially corrugating medium, made from hardwoods, is currently one of its major products. In addition, the introduction by the company in 1955 of various colored linerboards in a variety of shades for conversion into corrugated boxes has enlarged the scope of the demand for container board grades of paperboard.

While these advances are in the mills division, the company also has made good strides in its container division. Constant research and development over the past few years has improved the strength qualities of corrugated boxes which are now being produced in a wide range of colors as a result of the introduction of colored linerboards by the mills division in 1955.

The installation in 1955 of special equipment for background printing and tinting presses for three- and four-color printing operations have contributed to the manufacture of a broad and more diversified range of colored corrugated boxes.

The Keynote

Continuous improvement is one of the keynotes of all companies.

They are seeking to obtain higher pulp yields from wood supply, overcoming problems of high-speed operations in newsprint machines, making mechanical pulp from chips. Through the more complete utilization of forest products, there is greater conservation of Canada's natural resource of the forest. And from increased utilization of the wood in operations, is greater end productivity.

Some companies direct research efforts mainly toward improvement in design of paper products, to give customers the best possible quality and protection at a minimum cost. Others seek new adaptations of present products, development of new products, improvements in durability as well as styling.

In addition to product and process improvement, some companies seek product diversification. Along development lines in research, companies seek to improve manufacturing techniques, lower manufacturing costs, and product development, and adapting or fitting products to meet the specific needs of customers.

Companies are studying the possibility of pulping cedar, better utilization of sawdust and other sawmill waste through conversion to building boards and other products. In the case of at least one company a pilot plant has been set up to test the latter possibility.

Out of this research have emerged important developments which appreciably improve current operations. There is the new groundwood process, suction roll silencers, automatic roll handling. The list is almost endless.

But all of this costs money . . . millions of dollars. Companies have to keep pace with demand and the only way they can do so is through large capital outlays. But all companies feel the squeeze through mounting costs.

Cost trends are generally up. These reflect substantial increase in many Eastern Canadian mills in labor rates in the spring and fall of 1955 and again since May this year.

In Eastern Canada, new labor agreements in the mill and woods unions provide for increases of approximately 7% in wage rates from May 1 this year and approximately 5% from May 1 of 1957. In addition, there were substantial increases in fringe benefits.

Breakdown of Costs

Here's a breakdown on how costs in the past year are estimated to have hit one company:

Manpower cost increased by about 7% in May.

Cost of electrical power purchased up 3%.

Purchase of coal advanced 3%.

Purchase price of operating materials up by 6%.

U.S. freight rates increased by 6% in March.

Pulpwood cost is expected to be increased by 3%.

The Industry's Growth

Here's the growth of the pulp and paper industry over the last 85 years:

	Pulp and Paper Mills	Total Employees excluding Woodlands	Gross Production
1871	21	760	$ 1,071,651
1881	41	1,588	2,509,993
1891	58	2,817	3,633,257
1901	53	6,236	8,627,577
1911	72	9,766	23,226,479
1921	100	24,619	151,003,165
1931	103	26,669	174,733,954
1941	106	37,154	334,726,175
1945	109	39,996	398,805,505
1946	113	44,967	527,814,916
1947	115	49,946	706,971,628
1948	117	51,924	825,857,664
1949	123	52,050	836,148,393
1950	123	52,343	954,137,651
1951	126	57,291	1,237,897,470
1952	128	57,803	1,157,837,657
1953	130	58,194	1,179,665,443
1954	130	60,837	1,241,558,451
1955 (est.)	130	63,500	1,300,000,000
1956 (est.)	130	65,000	1,400,000,000

*Excluding woodlands.

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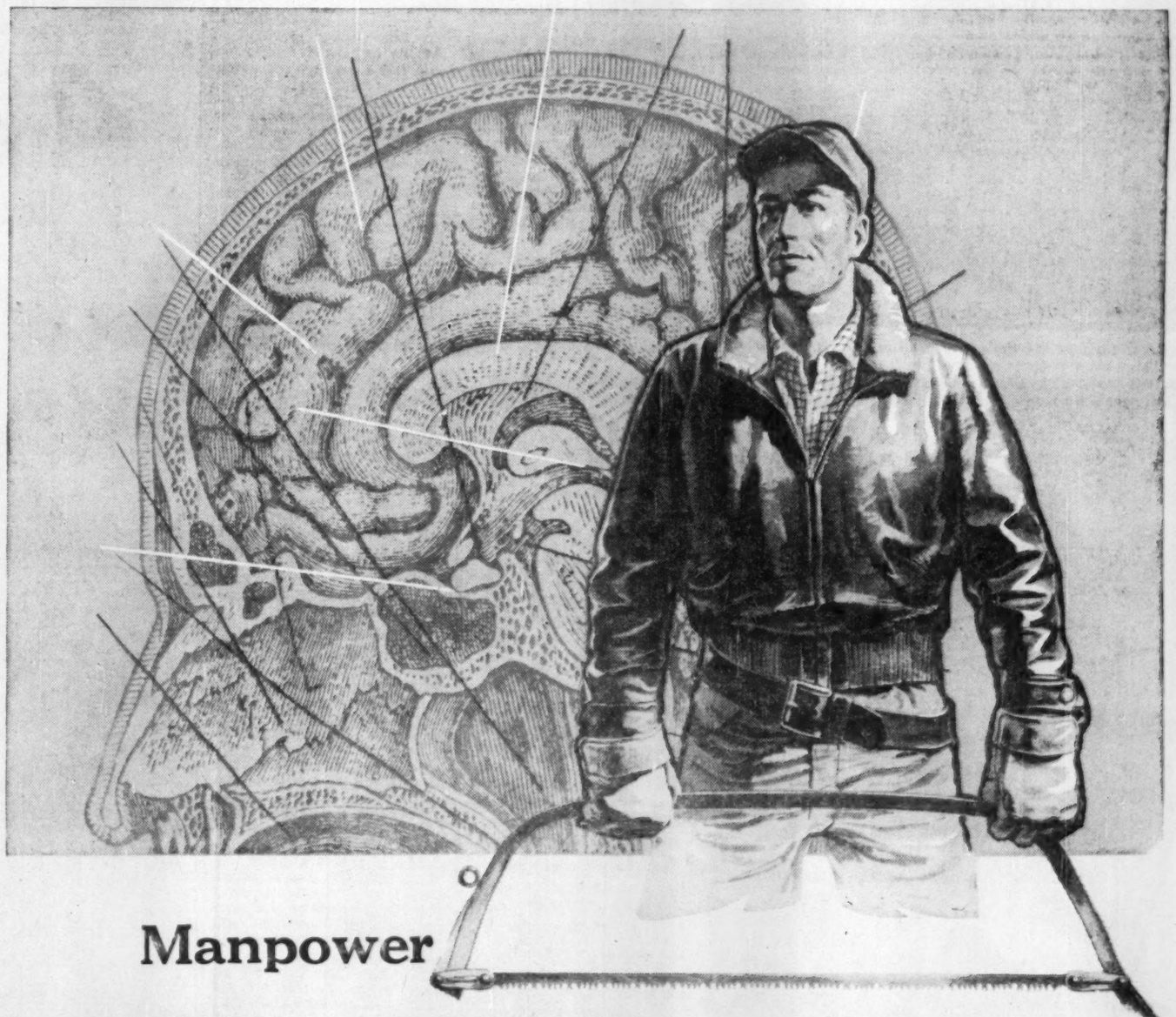


Manpower

In the factual world of business the word 'Manpower' is often used as a unit of work. On analysis, however, it defies definition, except in the very broadest sense. It has no human qualities and can be applied only in terms of numbers.

It has become a commonly accepted view that Canada's vast resources can support a substantially increased population. In this sense 'Manpower' is meaningful. As a term, however, it cannot measure the botanists or sea captains, the chemists and the economists, the woodsmen and the engineers, whose skills are only a small part of those required to produce Bowater paper.

Ingenuity, experience and skill are the vital qualities of the Newfoundlanders who build sluices and dams, fight forest disease and pests and produce newsprint at record speeds at the Bowater mills in Corner Brook. In Newfoundland the word is not 'Manpower' but 'Men' . . . men whose individual strength and ability are exported in the Bowater newsprint they make and send to the corners of the world.

Bowaters

THE BOWATER CORPORATION OF NORTH AMERICA LIMITED MONTREAL

Canada • United States of America • Great Britain • Australia • South Africa • Republic of Ireland • Norway • Sweden

1956 Pulp Output Rocketing, Should Reach 10 Million Tons

Canadian mills are humming along at record levels and wood pulp production this year should reach another new high of some 10.4 million tons.

That's the halt-way mark in long-range forecasts which predict output of 20,750,000 tons by 1980, equivalent to about 415,000 tons of new pulp capacity annually over this period.

That's equal to the average yearly increase between 1945 and 1955 when production expanded from 5.6 million to almost 10 million tons last year. The big expansion came in 1945 and 1946 when output soared by one million tons.

There's a big difference between the immediate postwar period and now, however, and it is a subject which all Canadian pulp producers are considering.

In 1945-46, much of the increase came from capacity which had been idle during the war because of manpower and material shortages.

Today, the industry is operating full out and all future expansion must come from additions to plant and equipment.

That means heavy costs for each new ton. The additional 10 million tons in 1980, plus the additional new machine capacity to convert the pulp into newsprint and other pulp and paper products will also mean heavy demands, in terms of manpower and wood requirements.

Annual Crop

From the woodlands, the industry in 1980 will require as an annual pulpwood crop of over 27 million cords compared with 13 million cords in 1955.

The increase of almost 400,000 tons expected this year is in the continuing race to keep pace with demand.

In newsprint and other finished pulp and paper products where demand is at record levels, pulp producers have to provide supplies to keep the other segments of the industry rolling.

That alone accounts for about 70% of the output.

The remaining tonnage is for "market pulp" which last year took some 2,368,852 tons compared with 2,173,160 tons in 1954. On the basis of first half results exports should be about 2.4 million tons this year.

On the average the U. S. has taken about 80% of Canadian pulp exports. It will likely continue to consume a large proportion but the future is difficult to assess.

Much of Canadian expansion into the U. S. has been in the form of a substitution from former imports by Scandinavia.

As a result, it is foreseen the rate of growth of the past 15 years from an average of 1,113,000 tons between 1940-45 to 1,670,000 tons in 1945 and 1,856,922 tons in 1955 is thought unlikely to continue.

The growth of the U. S. pulp and paper industry in recent years has been largely in the form of integrated production. Consequently, it seems reasonable to expect that substantial anticipated growth of pulp needs in the U. S. will be served by construction of new and integrated domestic capacity.

But the U. S. demand for pulp and paper products continues to race along and there is no sign of a letup in sight.

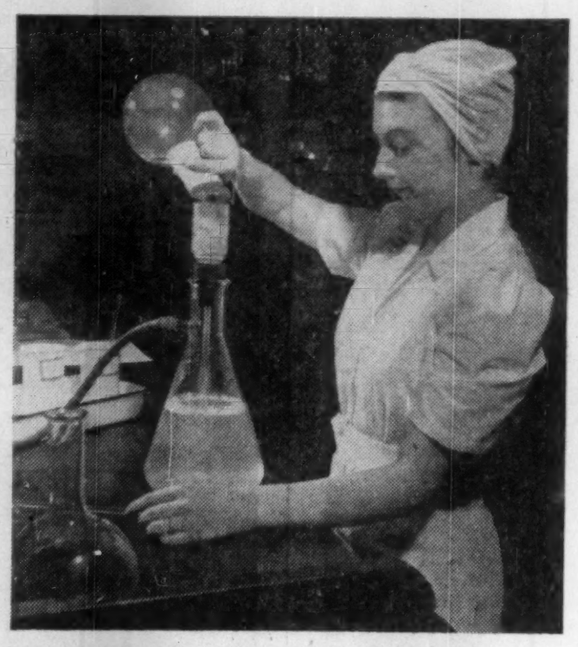
On the basis of various reports by groups such as the Stanford Research Institute and the Weyerhaeuser Timber Co. various forecasts have been made which indicate an extension of the favorable export trend from Canada.

The Weyerhaeuser report was used as one guide for the Canadian Pulp & Paper Association brief to the Gordon Commission this year.

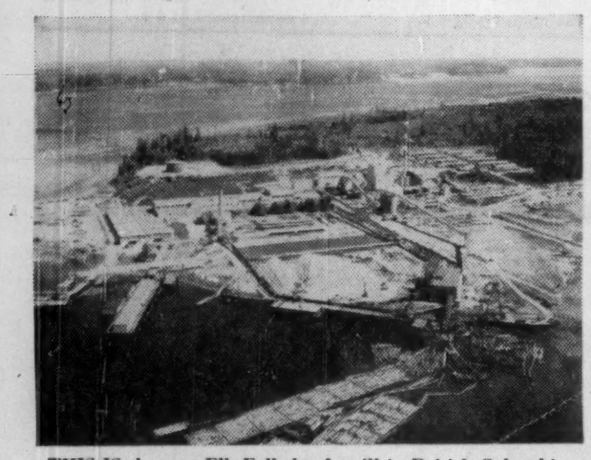
The CPPA brief suggests the U. S. which imports something more than two million tons annually will double that amount to 4.1 million by 1980 while nearly doubling their own consumption from 20 million to more than 39 million.

In this case, it would be ex-

(Continued on page 57)



CELLULOSE, the main chemical constituent in wood, is coming under intensive research in Canadian labs. Pulpmen are looking for new markets for this pulp product, which today helps make viscose and acetate textiles.



THIS IS the new Elk Falls kraft mill in British Columbia.

Swim Anyone? In Paper Suit

- **Paper bathing suits**
- **Paper dresses**
- **Paper bassinets**

These are just a few of the many items just around the corner, as the pulp and paper industry continues its search for new markets.

Can you visualize sitting down to a supper table set with very much improved yet disposable dishes, wearing a white paper shirt and your wife neatly attired in a new paper dress?

This concept of tomorrow is slowly becoming a reality through advertising drives and active research today. The potential market for these new products is tremendous, because it embraces virtually every man, woman and child in North America.

In the living room of your home, the baby may someday be merrily bubbling away in its compact paper bassinet. Your bedroom may be comfortably outfitted with paper bed linens, and paper rugs may cover the floors.

For the pulp and paper industry, these things represent a possible major new outlet for pulp and a development which is already capturing their interest. Today, research strides in this direction and advertising campaigns to persuade the housewife that these disposable products are acceptable have been centred in the U. S.

There's lots of work to be done yet. But if there is surplus pulp production in a few years—and some industry leaders have expressed fear there may be because of the great volume of new capacity coming into operation — Canada's big industry is going to have to shop around for markets. If that's the case, this untapped household market could be a bright hope of the future.

There are many aspects to this possible development, but a little more research for further product improvement might go a long way toward opening up this market. Although the products have been improved considerably in the last two or three years, there is much yet to be done through research. Also clever ad campaigns will be needed, and there will have to be national distribution outlets for these products.

Use Plastic Coating

Improvement of the product through coating paper plates with polyethylene to make them moisture-proof and gravy-proof has already started. And two companies — Continental Can and Keyes Fiber — have begun national advertising campaigns to persuade the housewife that new dishware made from paper (or molded from pulp) is acceptable, economical and convenient.

This idea isn't a dream. In the United States several companies have already launched programs to develop this market for cheap, disposable dishware, table linens, bedlinens and clothing.

Kimberly-Clark Corp. has already produced a skirt made of paper recently advertised in a major U. S. fashion magazine. At a pulp and paper convention in New York last February this company exhibited not only a ladies' skirt but also a paper bathing suit, coveralls of paper and even a ladies' evening dress — beautifully designed, with good drape, fireproof, and waterproof — made of paper. The company is already producing such items on a pilot scale, and the coveralls are already a commercial item — used as disposable work clothes by workers in atomic energy plants.

Other companies in the United States are trying to move into the men's clothing field, with a disposable shirt which a man could pick up at a convention, for example, use during the day and then throw out. The cost would be small, the convenience tremendous.

They are also trying to de-

(Continued on page 57)

Name the material . . . ore, sand, gravel, wood chips, pulpwood, coal, cement . . . and Forano, with over 80 years' experience, can recommend and supply the *complete* conveying system to do the job efficiently, economically.

This one source of supply can design, manufacture and install belt and screw conveyors, bucket elevators, feeders, trippers, drives and the steel structure, if desired.

Yes, you name it and we'll move it . . . you'll find the Forano name in every major field of industry doing just that . . . efficiently, economically.

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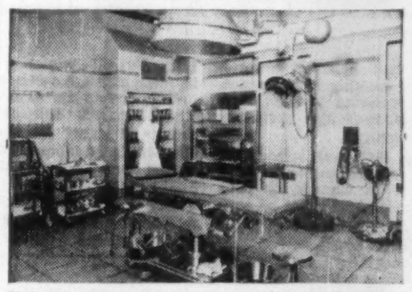
New 7-wing, 8-level University Hospital, University of Saskatchewan, Saskatoon. Architects: Webster & Gilbert. Consulting architects: Govan, Ferguson, Lindsay, Kaminker, Maw, Langley, and Keenleyside. General Contractor: Smith Brothers and Wilson.

At University Hospital,

conditioned air contributes to comfort of patients

Another example of how Canadian Sirocco meets air conditioning needs

Maintaining adequate general air conditions in a hospital the size of the new University Hospital, Saskatoon, Saskatchewan, requires reliable, efficient equipment. Here, where new life begins, and many lives are saved through the miracles of surgery and medicine, effective circulation, tempering, washing, and filtering of air is extremely important.



University Hospital is also a training, research, and special-treatment center. Above: one of the 13 modern, well-equipped operating rooms.

It is significant, then, that Canadian Sirocco equipment was chosen to do the job.

The hospital includes 13 operating rooms, maternity suites, nurseries, 12 allergy-control rooms, disturbed-patients' ward, kitchen, cafeteria, nurses' stations, classrooms, washrooms, and an extensive laboratory . . . all serviced by Canadian Sirocco.

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Manufacturers of Quality Newsprint

HEAD OFFICE AND MILLS

GRAND FALLS, NEWFOUNDLAND, CANADA

Pulp Output Heading For Peak

(Continued from page 56)

pected Canadian exports to the U. S. will be about 3.7 million by 1980 compared with about 1.8 million tons last year.

Canada's next largest market is the U. K. where the way was recently paved for bigger Canadian sales through lifting of import controls on wood pulp. This action was the result of a British commitment to the Organization for European Economic Co-Operation to raise its proportion of license-free imports from 85 to 90% from Western Europe. It was to have taken place in the fall of 1955 but Britain's gold and dollar reserves were at a low level. The present action raises the proportion to about 93%.

Canadian exports to the U. K. market have expanded since 1940 because of the war which cut off Scandinavian supplies. Today it takes approximately 13% of Canadian production (280,000 tons).

Scandinavia in Lead

In the postwar period Scandinavia has again moved into the lead as the major supplier of that area. However, Canadian shipments have not slipped back to their extremely low postwar position despite currency restrictions.

The 13% now marketed there represents a sharp increase from 1929 when Canada only exported about 4% of total pulp exports there and less than one third of shipments to all other markets, excluding the U. S.

Postwar export volume has also risen sharply in Belgium, France, Germany and Italy although it is still not large in terms of total Canadian shipments. These four countries take about 60,000 tons annually or 12% of Canada's overseas shipments.

But reports indicate Europe, including the U. K., holds a considerable potential for expanded pulp shipments. By 1980, European demand for pulp and paper products of all kinds is likely to be about 20 million tons while productive capacity of European mills will be equivalent to about 14.4 million tons of pulp.

Here's the breakdown:

	Thousand Tons
Estimated total pulp produced by European mills	14,000
Less Estimated Exports	5,375
Pulp available from own mills	8,625
Pulp imports	5,756
tons	14,381

On this estimate, the gap between needs and output amounted to 5.6 million tons. This might be filled from increased European production using non-wood fibres, such as straw or esparto, increased European imports or from greater imports of woodpulp than projected.

Increase from Canada

However, if European requirements reach 20 million tons of pulp and this is met, an increase of about two million tons in market pulp from Canada is conceivable.

Another factor in the market pulp outlook is prospective requirements of non-paper or dissolving pulp grades in the Canadian market. Tonnage figures are small — approximately 63,000 in 1955 ranging from a low of roughly 18,000 tons in 1947.

In the U. S., it is estimated that consumption of dissolving pulp will rise to 1.8 million tons by 1975 or a 107% increase over present levels. In per capita terms, the increase is equivalent to about 56%.

If a similar increase is achieved in Canadian consumption, per capita use should increase from something more than 8 lb. in this country to 12.8 lb. per person in 1980 on basis of a 60% increase. Total consumption, taking into account population, might reach 165,000 tons.

It has been a long, slow but steady increase in Canada's development of export markets for its wood pulp. Since 1929, U. S. has taken about 80% of all Canadian exports.

In 1929 shipments amounted to only 830,000 tons and fell sharply during the depression years. By 1939 it had recovered only partially. During World War II, major changes occurred.

Exports Increased

Loss of imports from the Scandinavian countries, which immediately prewar had supplied about two thirds the U. S. market needs created major supply problems and to meet minimum essential needs of the wartime U. S. economy exports from Canada were greatly increased.

Canadian exports were raised to an average level of 1.1 million tons, almost double the 1939 volume, under the joint wartime controls of the two countries.

Following a leveling-off period immediately after the war, Canadian exports to the U. S. continued to expand as a result of the greatly increased U. S. consumption of all kinds of pulp products.

Canadian output was sought as a reliable source of supply and the U. S. looked more to their own supplies. Exports to U. S. of pulp are now about 1.6 million tons annually or almost three times larger than 1939 volume while Scandinavia has in recent years been supplying about 500,000 tons annually compared to about 1.4 million tons prewar.

To Asia, Africa and Far East areas Canada ships about 750,000 tons annually, of which Japan takes close to 50,000 tons alone and is by far the dominant market.

Over the next quarter century, it is estimated imports in these areas will rise by 290,000 tons and Canada will increase its market by about 700,000 tons.

Chemical Grades

The main feature in pulp production continues to be in chemical grades. Bleached sulphite pulp output was up 21% last year and unbleached sulphite pulp, 8%.

Since 1947, the industry's output of kraft pulp has doubled; bleached kraft pulp output increased 6 per cent last year compared with 1954 while unbleached kraft pulp was up 5.1%.

As usual, some 70% of the total pulp production was used in Canada for the manufacture of paper, paperboard and other products. Total wood pulp exports were up nine per cent; groundwood pulp exports were up 11%.

While exports of dissolving pulp dropped by eight per cent —dissolving and special chemical pulp production was down 7.8% due to conditions in the textile industry — exports of bleached sulphite were up a lusty 39.9%. Kraft pulp exports were up 8%.

In the past 10 years, chemical pulp exports have increased by 85% and in the past five years by 31%. This reflects the growing demand for use in various paper products.

In Canada, three chemical pulping methods are chiefly employed. They produce sulphite, kraft and soda pulp. Sulphite and kraft pulps make strong and compact paper particularly when they are put through a process known as beating.

The degree of beating will determine in part the type of paper. From one pulp, the papermaker can produce blotting paper or a fine writing paper.

More Kraft

In the first six months this year, chemical pulp output amounted to 2,358,651 tons, up a sharp 174,966 tons from the like 1955 period. This was largely attributed to increased use in kraft paper and paperboard.

Total wood pulp production for the period amounted to 5.2 million tons, a sharp increase of 305,000 tons over the like 1955 period and reflected strength in most segments of the pulp and paper industry.

The only weak spot continues to be in the dissolving and special alpha grades where output is down at 179,858 tons compared with 188,561 tons.

Export markets are showing little change. Exports were down somewhat in April and May but there was a firmer tone in June. For the half year, they are up slightly at 1,186,697 tons compared with 1,152,698 tons.

Pulp Output, Exports For First Seven Months

	Production 1956	Production 1955	Change %	Exports 1956	Exports 1955	Change %
Dissolving and Special Alpha	245,955	252,878	— 2.7	205,312	221,269	— 7.2
Bleached Sulphite (Paper Grades)	405,871	361,138	+12.4	263,875	263,510	+ 0.1
Unbleached Sulphite	1,064,823	991,049	+ 7.4	216,444	200,540	+ 7.9
Bleached Kraft (Paper Grades)	468,630	444,730	+ 5.4	384,823	370,228	+ 3.9
Unbleached Kraft	415,776	380,733	+ 9.2	114,407	125,214	— 8.6
Other Chemical	135,167	110,858	+21.9	26,086	22,975	+13.5
Total Chemical	2,736,222	2,541,386	+ 7.7	1,210,947	1,203,836	+ 0.6
Mechanical (Groundwood)	3,279,380	3,115,258	+ 5.3	150,318	136,085	+10.5
TOTAL ALL WOOD PULP	6,072,324	5,714,207	+ 6.3	1,368,114	1,346,877	+ 1.6

Swim Anyone? In Paper Suit

(Continued from page 56)

velop disposable paper table "linen" for hotels, dining cars, restaurants, homes, as well as disposable paper bed "linens."

And In Barber Shops

Even into the barber shop, new products made from paper may find their way. Imagine having the barber throw over you a disposable paper apron instead of the cloth one which he may have used on half a dozen previous customers. He now usually uses a paper neckband to protect you from the germs and other things of the preceding customer. But a disposable paper "gown" would clearly be better for him and for you, if it could be produced cheaply enough.

For the pulp and paper industry such developments will open up vast new markets for bleached pulp.

The U. S. is showing strong initiative in such efforts to expand the uses of pulp and paper. Already baby bassinets have been manufactured of corrugated boards. These are small, light, easy to move, collapsible, and printed with appropriate designs in colors, to make them attractive. It is estimated there will be four million new babies in the U. S. this year. That means about 10 thousand tons of pulp would be used for this purpose if they all slept in bassinets made of corrugated board.

To reach this market, one company has been displaying full-page ads in national papers. This is interpreted to mean that not only are they showing the way to development of this market but also that they will be in the forefront if they can develop and expand sales into other fields, using new paper-type products.

The Canadian pulp and paper industry has never really had to seek markets. In the lean and hungry depression years, of course, there was overcapacity and a narrow market. As a result, even if companies wanted to, they couldn't launch an expensive and determined sales campaign.

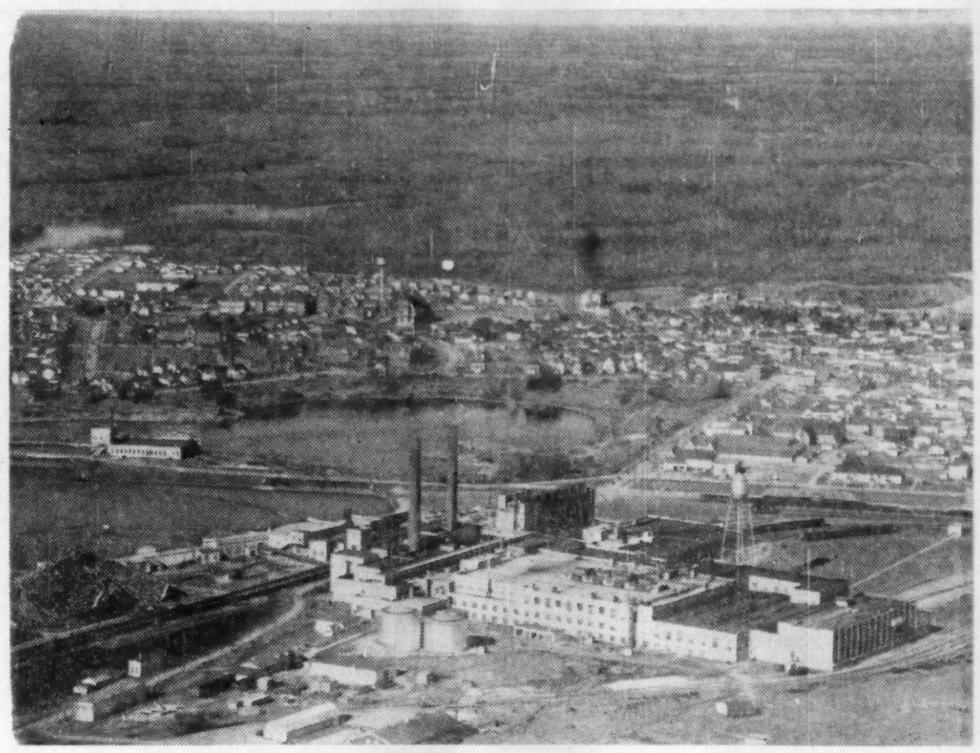
With the boom touched off after the Second World War and continuing unabated today, the industry has not had to worry about sales. In fact, world demand has far outstripped the supply of many products.

But with multi-million dollar expansion programs under way in the pulp field, and the spectre of overcapacity, it may be that the industry may have to revise some of its thinking to reach world markets.

While tariffs make it difficult if not impossible for Canada to sell fine and specialty papers in the U. S., there are still domestic and world markets to be won. The new capacity for pulp coming into production in the next few years in the U. S. may be able to look after much of its own domestic demand. It so, there is going to be further pressure put on Canadian producers to shop around the globe for outlets.

And there will have to be further intensive research to develop and improve new products to make them acceptable in the markets of the world.

Spruce Falls Power and Paper Company, Limited



MILLS AND TOWNSITE, KAPUSKASING, ONTARIO

ANNUAL MARKETABLE CAPACITY

240,000 Tons Newsprint

72,000 Tons Unbleached Sulphite Pulp

HEAD OFFICE: TORONTO, ONTARIO

In the next few years, it isn't anticipated demand of the U. S. for Canada's chemical pulp output will be large because the trend there has been toward integrated operations.

As a result, it seems likely a fairly large amount of its chemical market pulp will be available for exports outside N.A.

One estimate indicates there will be about 500,000 tons more chemical pulp for sale in Canada by the end of 1958 — at least half of this amount should be available for overseas mills.

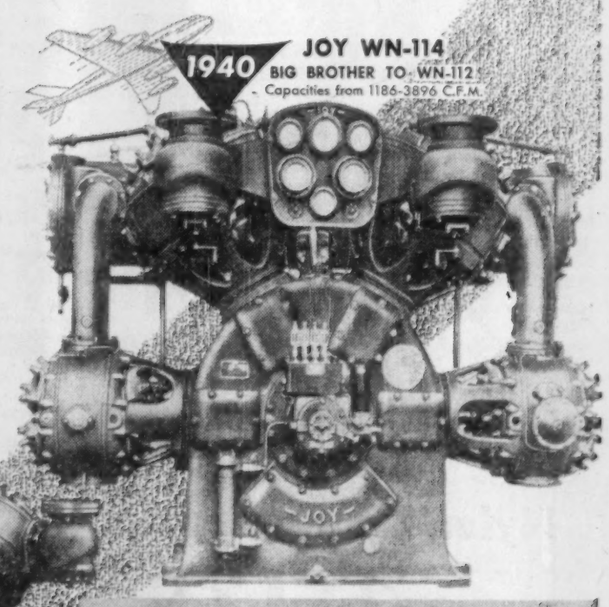
JOY STEPS YEARS AHEAD...

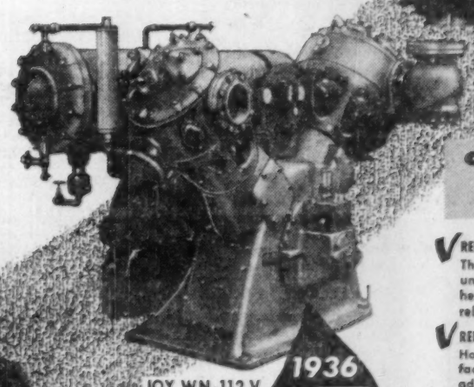
IN COMPRESSOR DESIGN AND ENGINEERING

● These seven JOY compressor illustrations and their dates tell a story of design leadership in the compression of air and gases. Here, is visual proof of the part JOY has played in the progressive development of compressor design and construction.

The design of JOY Compressors is years ahead of the field, offering greater economies and higher efficiencies to the modern user of air power. We know because we have designed and built them all.

Compare the inherent advantages of the old and the new in Air Compressors—and insist on these advantages in your Compressed Air Plant.





JOY WN-112 V VERTICAL—THE FIRST OF THE PRESENT DAY MODERN TYPE COMPRESSOR—STILL THE LEADER IN IT'S CLASS
Capacities from 378-1100 C.F.M.

CHECK THESE QUALITY CONSTRUCTION FEATURES

- REPLACEABLE CYLINDER LINERS — These satin finished liners assure uniform cylinder walls for efficient heat transfer and eliminate cylinder reboring.
- REPLACEABLE CROSSHEAD GUIDES — Honed "mirror-finished" wearing surfaces eliminate periodic crosshead adjustment.
- BEARINGS WITH "ROLLING SURFACES" — Anti-friction, spherical roller bearings eliminate wear and need for adjustment inherent in sleeve-type bearings.
- HEAVY-DUTY INTERCOOLER — Easily cleaned when necessary—insures maximum cooling for greater compressor efficiency.
- LOW HEIGHT (7 feet 7 inches) eliminates all headroom troubles when servicing or inspecting.
- FORCE-FEED LUBRICATION — Use of bronze-screen, replaceable filter unit supplies clean, dirt-free oil to all bearing surfaces.
- DIRECT, STREAMLINED AIR PASSAGES — Streamlined air passages with direct connection of intercooler and cylinders give maximum efficiency and minimum piping problems.
- DUAL-CUSHION ANGLED VALVES — These valves, in combination with truncated pistons, give minimum valve clearance and maximum compressor efficiency.

Modern short stroke piston design means longer compressor life.

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SUDBURY • ELLIOT LAKE • WINNIPEG • CALGARY • VANCOUVER

It's Easy to Burn Million Dollars— Forest Losses Hit the Industry Hard

For Canadians, the forest is perhaps the greatest source of the country's wealth.

That is why its long-term future is so vitally important to Canada's 15 million people in all 10 provinces. That is also the reason that conservation is increasingly stressed.

This policy, accepted by everyone, and certainly practised by the industry is not something that comes overnight. But it is gradually coming more and more into its own.

One reason for this development is increasing public awareness that this rich natural resource can be snuffed out in wide areas as quickly as a careless smoker tosses a lighted cigarette or match into a dry bush.

The policy of conservation is evolving, too, as an increasing necessity in terms of dollars and sense. Forests conserved, mean dollars saved, and is a necessity for perpetual yield.

In older countries of Europe, for example, forest conservation is a well-integrated program in which the multiple use of the forest is so managed that each acre produces its greatest possible return in wood fibre, fish, game or recreational value.

In this country, until very recent times, the forest has merely been cut in the most economic manner possible and the new forest, growing in its place, has come about purely by natural conditions.

Unlike Europe, and particularly the Scandinavian countries, where scarcity has made careful regeneration a necessity, North America generally has practised little forest management with the exception of some organized fire protection.

However, with demand for wood fibre of all types constantly increasing, with growing population, new uses, increase in literacy throughout the world, the need of better action in forest management is seen among many industry spokesmen as being forced upon this continent.

Orphan Step-Child

While conservation is still considered the orphan step-child of the forest industry, there have been advances in this field. They are still slow but the money, time and effort which the forest deserves is gradually shifting to its protection, improvement and establishment as a full-time renewable natural resource producing the raw material for the manufacturing end of the industry.

To the world, the Canadian forest is often looked at as a marvel. Its trees are of several different kinds, adapted to all varieties of soil, from swamp and muskeg to alpine meadows.

Much of Canada's dominance in world markets in the past has resulted from this abundance of pines, spruce, firs, hemlocks and cedars so greatly in demand in all countries of the globe.

What about the future? Let's take a look at some of the steps taken under these heads:

- Provincial and federal governments.
- University and industry personnel.
- A forthcoming meeting at Winnipeg where conservation will be the keynote.

All provincial services are concerned about good forest management since they have millions of acres of forest land under license to operating companies on their crown-owned land. From British Columbia to Newfoundland, each province has management plans which are agreed upon with their technical forestry staff and the foresters of the operating companies as best suited under classical operating methods for the perpetuation of the forest crop.

These working plans are made in advance of the granting of leases and are reviewed annually by the provincial departments concerned to take care of any necessary changes or improvements. To ensure companies comply with the plans, foresters of the provincial governments also annually check to see that the operations have been conducted under the standards established.

Dual Operator

In **Alberta** the Eastern Rockies Forest Conservation Board operates over 900 square miles of forest land on the slopes of the Rockies which provide the drainage for the south Saskatchewan and the irrigation districts in the eastern part of Alberta. This strip of forest, extending north from the international boundary to the vicinity of Red Deer, Alta., is managed as a dual operation between the Provincial Forest Service and the Federal Government with more intensive protection and forest management than is possible on other more northerly regions in Alberta.

One of the forest protection developments put into effect by the Eastern Rockies Forest Conservation Board in 1956 was an intensification of the protection during the week ends when the heaviest use of the forest is made by the general public for hunting, fishing and recreation. Instead of reducing forest protection staff during weekends the rangers and other personnel of this area are on duty during the entire weekend, especially in periods of high fire hazard. In addition, the Calgary office has sufficient staff members on hand to take care of communications and the entire area is alerted during week ends when the forest fire hazard is the greatest.

There is considerably more administrative difficulty involved in having the forest protection staff on a seven-day week. In addition, these rangers and their families are deprived of their week-end recreation enjoyed by the rest of the public. However, adjustments of this sort have been made administratively and the benefit in increased policing of the valuable forest during these summer weekends has shown itself in reduced fire damage and a greater contact with the general public by the fire ranger staff.

The same intensification of forest fire protection is said urgently needed in the more northerly areas in Alberta and other provinces which have far northern forests now very lightly covered by forest rangers, lookout systems, or aerial fire patrol, in comparison with the actual fire protection needs.

This year both the coastal areas of B. C. and the northern forests in Alberta, as well as a portion of northwestern Ontario, were exposed to extensive fire damage during extremely high forest fire hazard conditions. In all of these areas the very large size of the individual ranger districts and the difficulty of getting equipment rapidly to fires started by campers, smokers, tourists or occasionally by lightning made it difficult to keep fires within reasonable size or to extinguish them in early stages.

Land Clearing

One of the first practical steps in this direction has been taken by the Alberta Government in the formation of a land use advisory committee composed of representatives of all the government departments having to do with land use.

Northern Alberta is one of the areas which is most closely concerned with land clearing on soils which are debatable as to their capability of sustained

(Continued on page 59)

FIRE is the deadliest enemy of the pulp and paper industry. Each year it wipes out miles of green woodland. Companies use every effort to prevent forest fires, including signs like this (in Newfoundland).

How Forests Depleted

Average Annual Depletion 1944-1953 (Island of Newfoundland, but not Labrador, included since 1949)

	000's of cu. ft.	% utilized	% depleted
Logs and bolts for domestic use	1,223,009	38.9	36.5
Logs and bolts for export	11,279	0.4	0.3
Pulpwood for domestic use	848,239	27.0	25.4
Pulpwood for export	168,197	5.4	5.0
Fuelwood	779,269	24.8	23.3
Ties, poles, pit props, posts, rails	72,115	2.3	2.1
Miscellaneous	38,536	1.2	1.2
	3,140,644	100.0	93.8
Wastage by forest fire	207,165		6.2
	3,347,809*		100.0

*Does not include wastage caused by insects, disease, or natural mortality.

Death by Fire

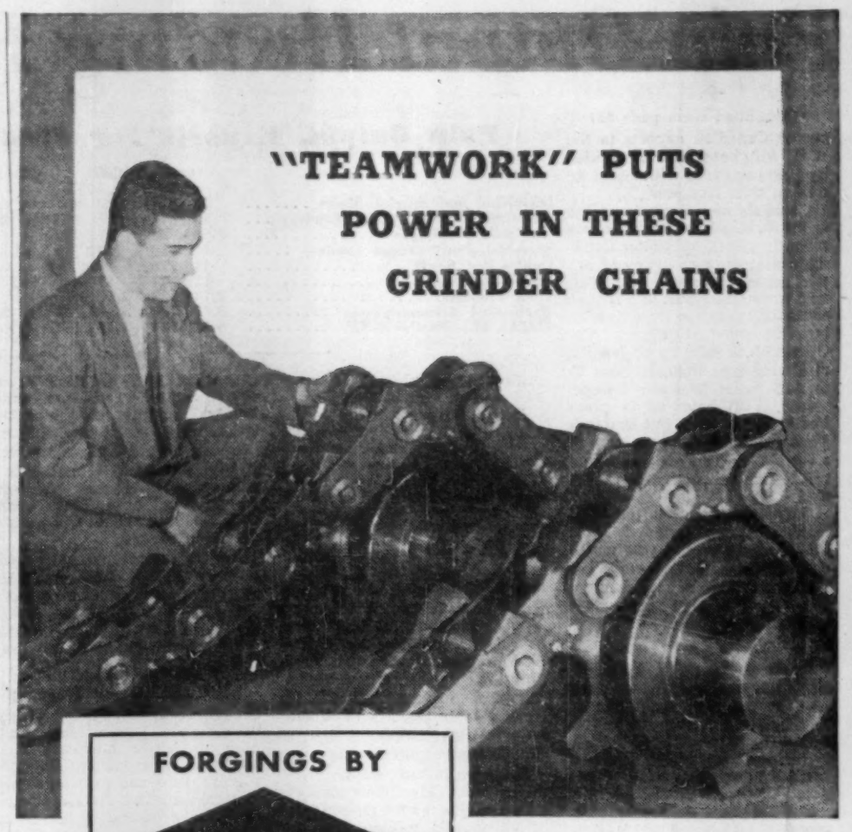
SUMMARY OF FOREST-FIRE LOSSES IN CANADA, 1955
Compared with 10-year Average, 1945-1954

		Provinces (1) Annual Average 1945-1954 (2)	Year 1955 (3)	Yukon and Northwest Territories Year 1955
Fires under 10 acres	number	3,902	5,213	81
Fires 10 acres and over	"	1,239	1,147	75
Total number of fires		5,141	6,360	156
Area burned—				
Merchantable timber	acres	255,278	344,556	4,659
Young growth	"	366,804	241,513	55,021
Cut-over lands	"	153,996	563,868	2,009
Non-forested lands	"	597,518	229,630	172,686
Total area burned	"	1,373,596	1,379,567	234,375
Size of average fire	"	267	217	1,502
Merchantable timber burned—				
Saw timber	M ft. b.m.	382,041	238,141	25,549
Small material	cords	1,054,139	2,321,077	8,713
Estimated values destroyed (4)—				
Merchantable timber	$	1,575,591	4,491,543	159,376
Young growth	$	985,308	763,497	110,043
Cut-over lands	$	130,498	565,718	2,009
Other property burned	$	964,321	1,320,202	35,460
Total Damage	$	3,655,718	7,140,960	306,888
Actual Cost of fire-fighting	$	2,059,827	6,570,944	110,244
Total damage and fire-fighting cost	$	5,715,545	13,711,904	417,132
Other fire protection costs	$	.....	16,142,539(5)	105,964
Area under protection, sq. miles		.....	1,052,590	118,500

FOREST FIRES IN CANADA, 1955, BY CAUSES
Compared with 10-year Average, 1945-1954

	Provinces (1) Annual Average 1945-1954 (2)	%	Year 1955 (3)	%	Yukon and Northwest Territories Year 1955	%
Camp-fires	829	16	899	14	42	27
Smokers	1,164	23	1,174	19	21	13
Settlers	535	10	632	10	..	..
Railways	546	11	570	9	5	3
Lightning	924	18	1,893	30	54	35
Industrial Operations	244	5	295	5	1	1
Incendiary	139	3	156	2	..	..
Public Works	79	1	78	1	1	1
Miscellaneous Known	449	9	387	6	3	2
Unknown	232	4	276	4	29	18
Total	5,141	100	6,360	100	156	100

(1) Includes federal lands within provincial boundaries.
(2) Does not include Newfoundland.
(3) Newfoundland included.
(4) Wood values are based on prevailing stumpage rates only; damage to soil, site quality, stream flow regulation, wild life, recreational and similar values is not included.
(5) Estimated charge for new equipment, improvements, maintenance, salaries, etc, for year 1954.



FORGINGS BY
Canforge

Look at these two sections of grinder chains manufactured by Forano Limited for paper mill grinders. Each individual grinder requires 4 of these chains approximately 40 feet long. Inside and outside links are supplied by Canada Foundries & Forgings Limited.

CANADA'S pulp and paper mills are large users of Canforge quality forgings. To meet the rugged service demanded in the various paper-making processes of this primary Canadian industry, Canada Foundries & Forgings Limited has developed the forging skills, complete machining facilities and a vast capacity to produce forgings of the highest quality. With this up-to-date equipment, Canada Foundries & Forgings Limited, is in a position to supply forgings as small as ¼ ounce or great forgings weighing up to 40,000 pounds.

Next time you have a forging supply problem, remember that Canforge facilities and experience are at your call.

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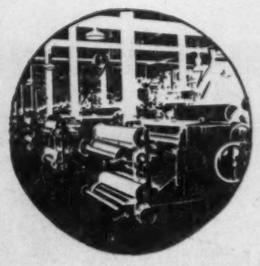

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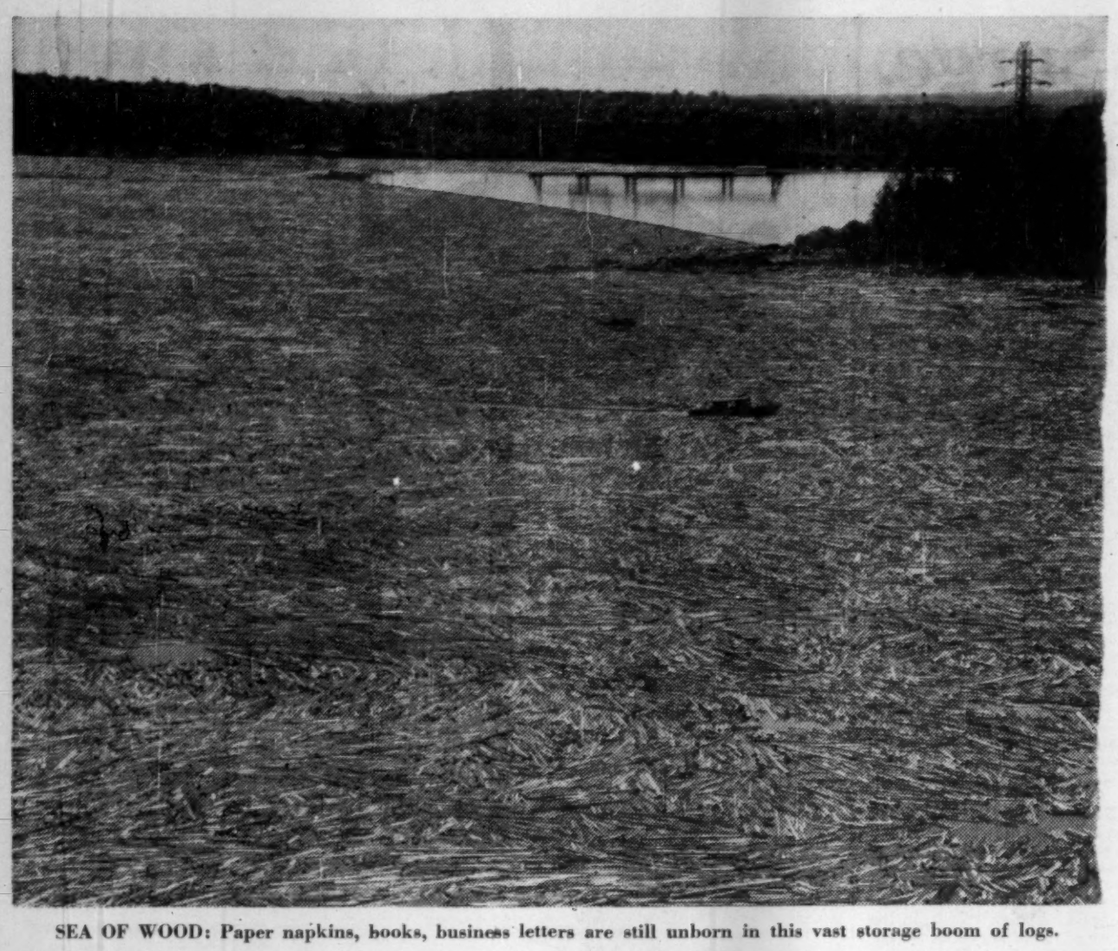

SEA OF WOOD: Paper napkins, books, business letters are still unborn in this vast storage boom of logs.

Forest Saved, Dollars Earned In Vital Conservation Policy

(Continued from page 58)

profitable agricultural use. In the aspen belt across the northern Prairie Provinces, much of the soil is listed as grey woods soil which can grow crops of timber or, if cleared of timber, can grow agricultural crops under careful soil management. However, these soils are very light, easily subject to erosion by water or by wind, and are not high in fertility.

It is therefore said essential to survey soil capabilities carefully in advance of any permission for settlement and to ensure that the timber is removed carefully and not destroyed in extensive fires which have often resulted from land clearing in such areas.

In **eastern Saskatchewan,** a similar situation has developed where land clearing by heavy bulldozers or other mechanical equipment has been carried on extensively without careful analysis of the soil capabilities. Many cases exist where farms which have been cleared less than two years are already heavily gullied and in some cases the soil has been washed from the fields so heavily that roadside ditches are completely filled and streams are heavily laden with filth in the spring rains.

Since this same area is on the head waters of the Assiniboine River and since it therefore contributes to the flood conditions in Winnipeg and Portage La-Prairie, this question of land-use and land-clearing has interprovincial significance and is of interest to city dwellers as well as to those concerned in the actual farming operations where the clearing has taken place.

New Sask. Pulp Mill

A new development in Saskatchewan is noteworthy. A large pulp mill operation is being established in the Prince Albert area to make use of the extensive forests of spruce, jack pine and poplar which extend in a productive belt approximately 100 miles in width across the entire province from Prince Albert north. The pulp mill will bring greatly improved markets to the tree farms and privately owned farm woodlots of that area and will also substantially increase the income from forest products for the province as a whole. The recent establishment of a mill west of Edmonton in Alberta along with the operating mill at Pine Falls in Manitoba places all three prairie provinces in the pulp and paper business along with all the other provinces, with the exception of Prince Edward Island.

Even in **P.E.I.** pulpwood is cut and exported for pulp and paper use, although actual mills do not exist on the island.

"Smoke-Jumpers"

Saskatchewan still holds the unique position of having the only parachute forest fire fighting brigade organized in Canada and this active group has prevented many serious fires by early action in the more remote regions which they can reach easily from aircraft. The "smoke-jumpers" as they are called, are thoroughly trained at the Prince Albert airport, and then given practical field experience in advance of the fire season. When the fire season does begin these men are on 24-hour-a-day call to be dropped into remote bush areas where fires have been reported by other observers.

Frequently their arrival within hours or sometimes minutes of the fire outbreak permits them to extinguish the fire after it has covered only a few square yards. A fire which is controlled within a short time of its origin causes little or no damage, while the same fire neglected for 24 hours may require the services of hundreds of men and expenditures of hundreds of thousands of dollars if it grows to large proportions.

The pulp and paper industry, which is a newcomer in the forestry field for Saskatchewan and Alberta, has long been established in the eastern half of Canada and is well developed on the Pacific Coast. Much of the actual practice of forest conservation is on the limits operated by these companies and in many cases they are now developing independent research projects of their own, to take care of special regional or species problems.

A good example of this is the woodlands laboratory of the **Abitibi Power and Paper Co.** near Port Arthur, where approximately 40,000 acres of commercial timber limits are being operated under a number of different systems of cutting to learn the best methods of getting reproduction of good species by actual pulpwood cutting operations. This is, naturally, a long-term project and is being developed on a large scale with complete records.

As a result, the findings may be quickly transferred to the other commercial operations of the company or to other companies in this area. Other co-operative forest management research products are being operated in this region in co-operation with the Ontario Government and with assistance including the research staff of the University of Toronto.

Year-Round Operation

Forest management eventually will result in shorter cutting rotations with permanent road systems and, perhaps, permanent camps established so that the same forest workers may operate in the same woods all their lives. Development in this direction is shown at Marathon, 180 miles east of Port Arthur and Fort William, where a company has developed permanent camps and permanent roads for year-round operation.

By coming back to the same area at more frequent intervals and taking only as much wood as has been grown in the intervening time, a considerably greater volume of wood is recovered from the same area.

All the trees which would have died from overcrowding or competition in the interval are taken out as thinnings so no wood is thus lost from the mortality factor.

It is also an advantage to have permanent roads from the fire protection standpoint, and frequently the insect injuries are kept to a minimum by this same practice of forest conservation possible with shorter cutting cycles.

Similar experiments have been carried on by the **New Brunswick International Paper Co.** in the Gaspe area, and by **Fraser Cos.** on their limits in New Brunswick. The **Mersey Paper Co.** has also developed selective cutting practices on a large scale and valuable results are being learned from all of these industry-sponsored practical forest managemnt programs.

Tree Farming

One practice which has advanced rapidly during the past three years is that of tree-farming sponsored by the Canadian Forestry Association and its branches and affiliates from coast to coast. After three years of operation the tree farm movement now has over 386,000 acres of privately owned forest land enrolled with some 300 owners operating timber areas from the small 10-acre farm woodlot to 75,000-acre industrial forests owned by some of the larger operating companies.

Tree-farming is the program by which timber is grown on the land as a continuous crop just as agricultural crops are produced continually from farm land.

Owners enrolled in this Forestry Association-sponsored program agree to maintain their tree farms permanently as timber-producing areas, to cut carefully to guarantee a new crop and agree to protect the area against fire, grazing, insects or

(Continued on page 62)

SOUND FOREST MANAGEMENT... KEY TO CONSERVATION

Taking the measure of tomorrow's forest wealth

Abitibi's raw material is the forest tree.

To ensure a continuing supply of pulpwood in perpetuity, it is essential for us to keep a watchful and protective eye on nature's process of regeneration.

In our forest limits it is routine procedure to have foresters make periodic surveys of areas where cutting has been done, to investigate the quantity and quality of nature's regeneration. Thus we keep our information up to date on all our forest resources.

Abitibi

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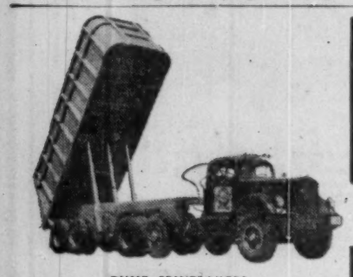
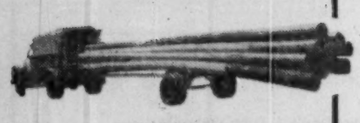
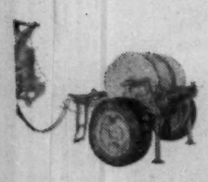


DUMP SEMITRAILERS

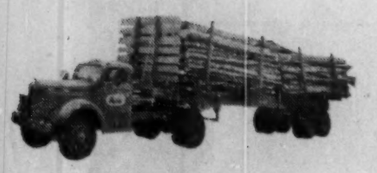


POLE TRAILERS



REEL TRAILERS

HEAVY DUTY LINE CONSTRUCTION BODIES



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Demands on Our Forest Riches Surge, Where Does the Industry Cut Next?

A forecast of demands on Canada's pulp and paper industry by 1980 indicates the industry will then require over 27,000,000 cords of pulpwood.

As consumption in 1955 was in the order of 12.5 million cords, total increase in the industry's annual pulpwood requirements over the ensuing 25 years will be in the order of 15 million cords.

The extent of Canada's forest resources is not accurately known. A measurement of this wealth, and the anticipated demands upon it, is just now being made for the Royal Commission enquiring into Canada's economic prospects.

Some facts, however, are known. According to the latest estimates of the Federal Forestry Branch, Canada's productive forests cover about 825,000 sq. miles or almost a total land area of the Provinces of Ontario and Quebec combined.

From coast to coast, forest areas now held under lease for pulpwood production total some 182,840 sq. miles. In addition, just over 68,000 sq. miles of forestlands are privately owned and at a minimum it is estimated that at least 18,000 sq. miles of these privately owned lands are being held or used for pulpwood production. Thus it is concluded that at least 200,000 sq. miles or 128 million acres of forest land can be properly classified as currently belonging in the pulp and paper industry's forest in inventory.

On the basis of an average annual rate of growth of two tenths of a cord per acre, this area should provide this country with an annual pulpwood crop in the vicinity of 25.6 million cords. This is just 1.4 million cords short of the industry's estimated requirement in 1980.

The validity of this forecast hinges on attainment of a minimum average rate of growth of two tenths of a cord per acre per year. Realization of this objective will, however, be anything but automatic.

To attain this pulpwood crop, co-operation and effort on the part of the public, provincial and the federal governments as well as the forest industries themselves will be required.

In 1955, the Canadian pulpwood supply was derived from the following sources:

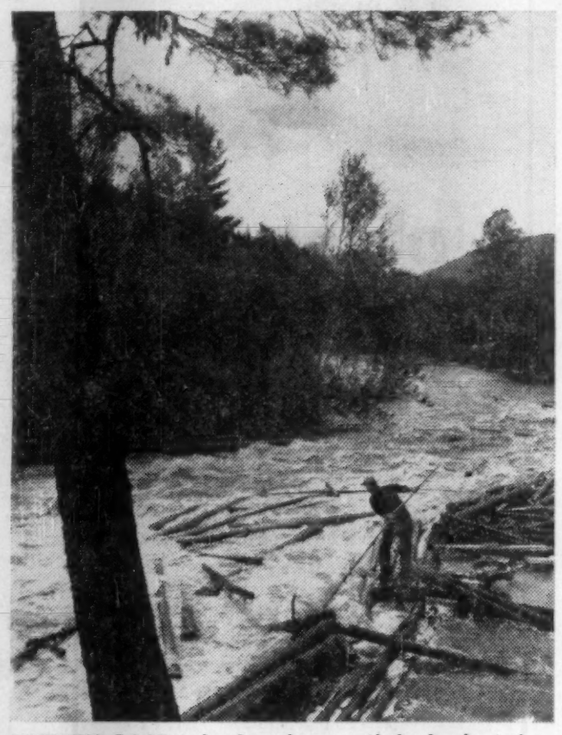
—Industry owned and licensed lands: 8.5 million cords.

—Large private holdings and woodlots: 3.7 million cords.

—Sawmill waste: 0.3 million cords.

Each of these three sources, it is expected, will in the future supply raw material to the industry in ever increasing quantities. Requirements not met from these sources will be made up through use of new timber limits and reduced fuelwood use.

Here's a picture of how Canadian pulpwood requirements in 1980 could be met, drawn up by the Canadian Pulp and Paper Association.



SHIFTING LOGS is hard work, even if the lumberjack has a river to help him.

Industry Owned, Licensed Lands

Industry owned and licensed lands it is estimated will provide a total of 16.75 million cords. The additional 8,250,000 cords above present supply could come from the following sources:

—More complete utilization of woodlands is expected to furnish an additional half million cords. This includes certain material now left in the woods, material presently marginal in value or located in inaccessible places. Better roads systems and improved equipment should put this additional wood within the economic reach of the industry.

—The use of new species of trees is expected to provide a further two million cords. Until fairly recently, spruce and balsam were practically the only species of tree used for pulp in Eastern Canada, while poplar and jack pine were used only in small quantities for special processes. Hard woods were not used at all. Technological advances—already fully developed—permit the use of practically all species of trees.

—Lower loss allowances should yield an extra 750,000 cords. Present conservative appraisals allow for a loss of 20% of the permissible cut due to fire, insect damage and disease. Reduction of loss from these hazards should permit a reduction in this allowance.

—A lower mortality rate is expected to furnish 2.5 million cords. Young growing stands of timber have a high tree density but as the stands grow older, trees require more room in which to grow with the result that some thrive at the expense of others. With forest management, stands can be thinned out so as to remove by harvesting many of the trees that would otherwise be suppressed and die in the natural process.

—An anticipated greater increment of growth is also expected to furnish an additional 2.5 million cords. It is estimated that some 60% of the industry's pulpwood forest are mature or over-mature. In such stands the increment or opportunity for growth is nil or negative. In a managed forest, each acre can be kept normally stocked and in production as mature timber is cut as soon as it has matured in order to make way for new trees.

Private Holdings, Woodlots

By 1980 total yield from private holdings is estimated in the vicinity of 5.2 million cords, an increase of 1.5 million cords over the present supply from this source.

Many of the factors which will increase the yield from the industry owned and licensed lands apply equally to private holdings and wood lots. However, as forestry practice on many private wood lots today is generally poor, proportionately greater increases can be expected from this source, provided that the forestry practice is improved.

Saw Mill Waste

Utilization of saw mill waste is expected to provide just over one million cords. This compares with approximately 300,000 cords utilized in 1955. Eastern Canada's saw milling industry has been producing approximately one million cords of slabs and edgings of species of wood suitable for pulp chips. Of this quantity, some 62% is used as fuel and 6% re-sawn into laths, box boards, etc. The remaining 32% is either burned or discarded.

Technical problems involved in debarking and transporting the currently wasted 32% are now being overcome and it is expected they will be completely solved in the not too distant future thus providing this mutually convenient pulpwood source.

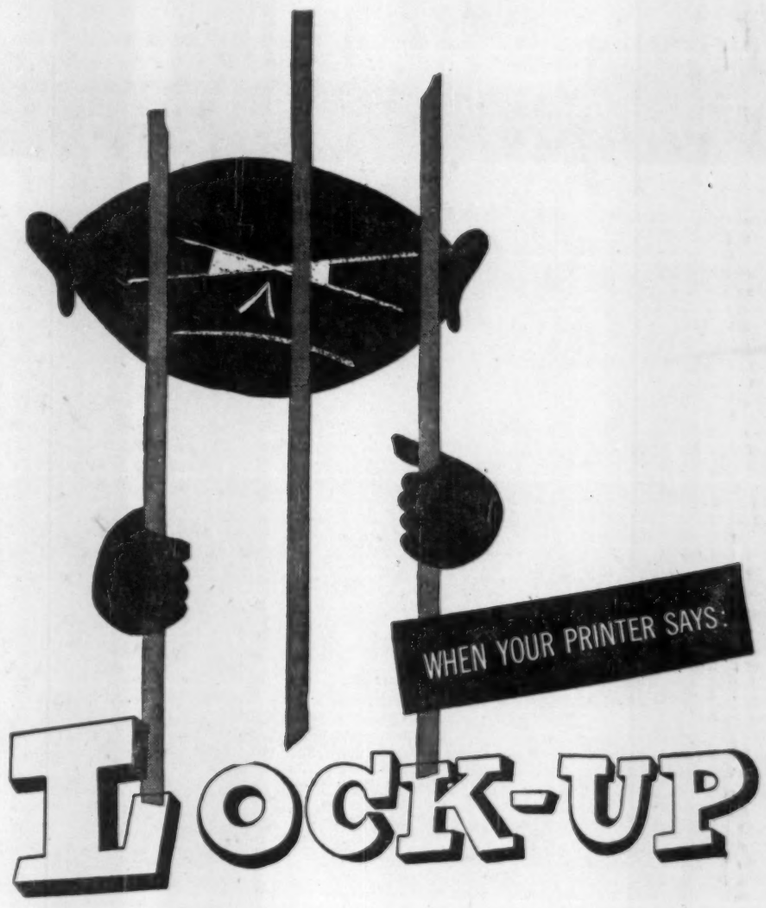
Fuelwood Reduction

Reductions in the use of wood for fuel purposes are expected to yield the pulp and paper industry about one million cords. Current statistics indicate that annual production and consumption of fuel wood is in the order of 10 million cords, though the industry generally believes this figure is somewhat high. Competition from other fuels should decrease the amounts of wood that are now used for heating and cooking purposes.

New Limits

The largest single addition to the pulpwood supply by 1980 is expected to be furnished through use of new timber limits. This source, it is anticipated, should in 25 years' time furnish approximately 3.5 million cords per year.

Total accessible productive forest land in Canada is 577,361 sq. miles of which about 250,000 sq. miles are presently unoccupied. In addition, some 248,000 sq. miles are currently classed as inaccessible. From these areas, the industry can borrow supply to fill its pulpwood needs until more productive and closer areas can be brought into full production.



. . he isn't talking about the "clink" or the "hoosegow" as you might think! He simply means that all the type and engravings for a printing job have been securely fastened together in a metal frame. When the job is "locked up", the frame can then be lifted and carried to the press without dropping any of the many pieces of metal needed to make up the page.

It just goes to show that the printer's language, like his craft, is so specialized that the buyer would be well advised to take the printer's word for it . . . he knows!

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FRASER COMPANIES' LARGEST WOODLAND DIVISION BLANKETED WITH PYE 2-WAY RADIO SYSTEM

PYE CANADA LIMITED installs a complete network of mobile and fixed radio communications for Fraser Companies, Limited, at their Miramichi Woodland area in and about Newcastle, N.B.

RICH BUT REMOTE

The wealth of Canada's woodlands is vast—and remote. An excellent example of this is the Miramichi area at present being worked by Fraser Companies, Limited. Over 2,000 square miles of rugged terrain dotted from end to end with logging camps, trucks, cars, tugs, offices, a mill, and the vast amount of stations and equipment needed to operate an undertaking of this size.

RADIO ELIMINATES MUCH PAPERWORK AND DELAY

Up 'till a few months ago the enormous task of co-ordinating and administrating was carried out through an outmoded telephone line which carried 37 subscribers. Mobile operations such as log driving and woodcutting were only contacted by messenger. The new Pye system has eliminated all this delay.

AUTOMATIC REPEATER STATIONS INCREASE RANGE

Two huge towers, rising from the highest peaks in the area are fed by automatic repeater stations which require only a monthly service check. The effective range is conservatively rated at 50 miles in any one direction for fixed-to-mobile and mobile-to-mobile communications, more than covering the Fraser Companies' workings in the Miramichi area, oblong in shape, approximately 100 miles long by 60 miles wide.

AS THOUGH IN THE ONE OFFICE

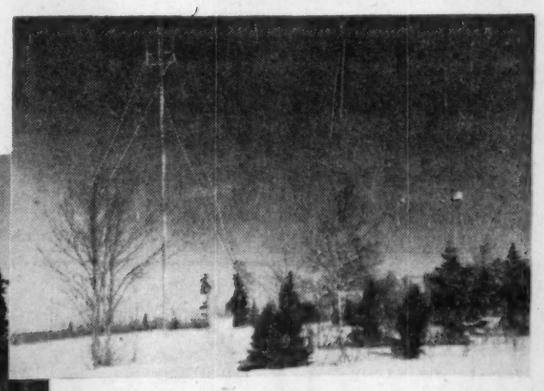
The woodlands manager in his office, the foreman in the bush, the skipper of a tug, the driver of a truck, the supervisor in his car, and all other key men can now work together as though in the one office—a great step forward in logging efficiency, and one of which both Fraser Companies Limited and Pye are justly proud.

PYE CAN SOLVE YOUR COMMUNICATION PROBLEM

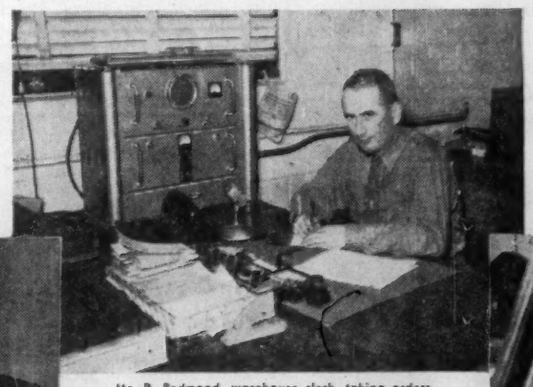
Your communication problem may not be as large as the one illustrated here—but no matter what it is or where it is, the world-wide experience and knowledge of Pye engineers can help you solve it. Drop us a line and one of our technical representatives will be glad to talk the matter over with you.

Mr. L. R. Burrell, Division Superintendent, and Mr. J. Hall, Division Forester, discussing locations in their wood limits where communications are necessary. Part of the 2000 square mile area which is now completely co-ordinated with Pye Radio Communications, can be seen on the map.

Fraser Companies, Limited No. 1 Wood Camp. Mr. J. Hall, Divisional Forester, inspects the generator that charges batteries for their two-way Pye radio.



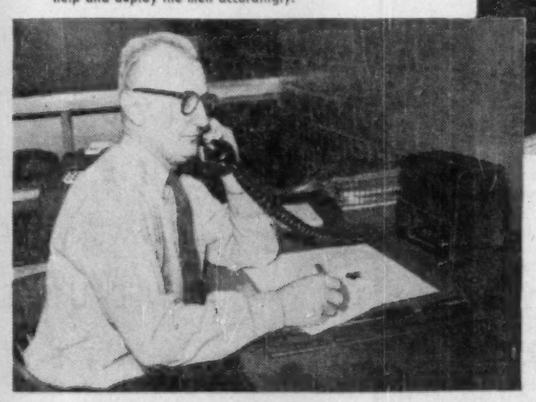
A 150' tower and radio shack on Ashton Hill (580' above sea level) houses an automatic repeater station that works unattended and needs checking only once a month. A 65' tower on Green Mountain (1900' in height) houses the other automatic repeater station.



Mr. L. G. Cummings, Paymaster, obtaining particulars from camp clerks on hours worked and quantities of wood cut for payroll purposes. When personnel apply for work, he can also find out if wood camps require additional help and deploy the men accordingly.

Mr. L. T. Burrell, Division Superintendent, demonstrates the Pye mobile radio unit in his car to Mr. D. Thibodeau, Maritime Division Sales Manager for Pye Canada Limited. With this form of communication he can keep in touch with all facets of his responsibilities with much saving in time and greater efficiency.

Mr. J. Hall, Divisional Forester operating inter-camp communications from No. 1 Wood Camp.



Mr. R. Redmond, warehouse clerk, taking orders for supplies from Wood Camps and Tug Boats, also despatching supply trucks.

COMMUNICATION DIVISION

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Here's $50 Million Industry Wrapped Up in Packing Paper

Present Canadian production of wrapping paper, which more than doubled since the immediate prewar period, is expected by the pulp and paper industry to double again during the next 25 years.

Last year Canada produced some 256,000 tons of wrapping paper valued at over $51 million. All but 14,500 tons or about 5.7% was used in Canada.

The 1980 projection, which takes into account both the estimated increase in population and assumes a three-fold increase in exports, indicates that production at that time likely will be in the neighborhood of 515,000 tons per year. Exports in 1980, it is assumed, will be almost 40,000 tons.

Basis for this optimistic forecast is that so many uses have been developed for wrapping papers that they have become inseparably enmeshed in the fabric of the economy with the result that as the economy grows and prospers, so will the wrapping paper segment of the pulp and paper industry.

Then, too, it is noted that per capita consumption of wrapping papers in Canada is still below that of the U. S. indicating room for an increase other than that associated with population growth.

Further, the industry believes that ingenuity, resourcefulness and research will continue to create new uses for these papers.

Unlike the pulp and newsprint segments of the industry, exports of wrapping papers have never accounted for a large part of total Canadian production. Currency restrictions in the traditional U. K. and other Commonwealth markets have reduced sales in that quarter while U. S. tariffs have prevented substantial entry into that market.

Overseas Markets

However, the industry expects that overseas markets, primarily those of Britain and the Commonwealth countries, will again turn to North America, and probably Canada, for supplies of wrapping paper when their needs grow beyond the supply abilities of their own resources.

Actually, wrapping paper is a misleading term for this segment of the pulp and paper industry as only about 20% of annual production goes into the familiar rolls of light-brown colored paper with which retail purchases, boxes, cartons and the like are wrapped.

The big outlet for wrapping paper today is actually the production of paper sacks and bags which in total account for over 55% of total wrapping papers used in Canada. Development of the multi-wall sack, in particular, has in recent years given new impetus and growth potential to the industry.

Other uses include gummed paper (such as is used for sealing packages in shipping rooms) which accounts for about 3% of total use, kraft mailing envelopes, 2%; and miscellaneous uses such as waxing, asphalting and waterproofing papers, 15%.

A measure of the importance of this industry may be derived from the fact that in North America, wrapping papers account for about 20% of total production of papers of all kinds. Next to newsprint, consumption of these papers is greater than any other single type.

Kraft Pulp

Wrapping papers are almost entirely made from kraft pulp. In Canada some 80% of this paper is made solely from unbleached kraft pulp. Nearly all the remaining 20% is composed of kraft pulp together with some other type of pulp.

Kraft pulp finds applications in wrapping paper production because of its great strength. In fact, it is the strongest paper known. While it is neither cheap or easy to produce, it can be made from such woods as, for example, jack pine which is not especially well suited to the production of other types of pulp.

Kraft pulp differs from its counterpart sulphite pulp (the strengthening or reinforcing agent used in manufacture of newsprint) chiefly in that the former is cellulose derived as the result of cooking or digesting in an alkaline solution as compared with an acid solution as is the case in the manufacture of sulphite pulp.

Wrapping paper was first made in Canada about 1805 in the country's first paper mill, located at St. Andrews, N.B. Start of the industry as it is known today, however, is usually considered to have occurred about 100 years later when the art of making kraft pulp, developed in Sweden, was introduced in Canada.

The first kraft mill, located in the Eastern Townships of Quebec, was also the first kraft pulp producer in North America.

By 1912 Canadian production of kraft paper was about 5,000 tons per year and consumption 3,000 tons, the deficiency made up by imports. In subsequent years production rose sharply.

War Production

During World War I, out of necessity due to shortages of other wrapping and packaging materials, production rose quickly. It was sustained during the immediate post war period.

In 1920, one of the boom years, production was 77,000 tons, slumping back to 53,000 tons in the following year.

The industry made a quick comeback with the economic boom in the 20's with production hitting a peak of 112,000 tons in 1928. In that year exports amounted to some 15% of total production.

As it was elsewhere, the effect of depression was felt by the wrapping paper industry.

In the period 1930-34, production averaged under 75,000 tons per year. In the second half of the decade, due largely to growing acceptance of the multi-wall sack and other applications, production increased once more with the annual average reaching 97,000 tons toward the end of the period.

During the war years, with shortages of jute and diversion of cotton to other uses, wrapping papers were once again much in demand.

Out of wartime necessity, large strides were made in the science of coating and impregnating the kraft going into the manufacture of multi-wall paper sacks, so as to make them serviceable for the packaging of a wide variety of products.

As a result the tonnage of kraft converted into multi-wall sacks had increased sharply at the war end and these gains were retained by the industry.

Outbreak of the Korean war again brought about an upswing in wrapping paper production which in 1951 totaled a record 257,000 tons.

In 1952, however, production again slumped with only 223,000 tons produced. Since that time, wrapping papers have been making a steady comeback and in 1955 production slightly exceeded the 1951 level.

Output This Year

This year wrapping paper production for the first six months at 147,002 tons is about 15% ahead of 124,494 tons in the corresponding period last year.

The industry has been experiencing softening markets toward the end of the summer but holds high hopes for an improvement this fall. Accordingly, it is predicted that 1956 production will top last year's record output.

Exports for the half-year at 8,407 tons are considerably ahead of 5,849 tons in the first half of 1955. Here again, after a brisk start early in the year, sales have fallen off in the past several months.

The industry, however, is hoping that an easing of dollar shortages in soft currency countries will improve this picture next year. It is confident that if overseas customers can find the necessary dollars, they will place a good part of their wrapping paper orders in Canada.

Multi-wall sacks, which account for about 33% of total wrapping paper used in Canada, have given the greatest impetus to the industry in the postwar period.

These sacks really came into their own during the second world war when, due to shortages of other materials, considerable research into such matters as design, coating and impregnating was carried out.

Depending on the product being packaged, multi-wall sacks can have from three to six plies or walls (and in special circumstances even more) with one or more of the walls being specially treated to give the sack special properties required for the handling and storage of the product being packaged.

Some sacks have special coating which make them moisture and waterproof. Others are treated to resist the inroads of insects, grease or acids while still others are treated to prevent loss of essential oils or flavors.

For the packaging of some commodities such as rubber, asphalt, waxes and resins, a special inner lining prevents these substances from sticking to the sack itself. There are now 10 basic designs of sacks.

Current Trends

Current trends in merchandising and warehousing indicate that the paper sack is headed for a yet more important role in the packaging of Canadian products.

Second most important outlet for the wrapping paper industry is the paper bag, which accounts for 25% all wrapping paper used in this country. Although paper bags have suffered to some extent from the inroads of plastic packaging materials, especially in the vegetable field, these losses have been more than offset by the increased use of paper bags due to self-service and super market type of merchandizing.

As a result, paper bag consumption has been making steady gains, although not as spectacular gains as in the case of the multi-wall sack.

If anything, upswing in the use of paper bags has cut into the sale of ordinary wrapping paper, such as is used by the corner grocer to wrap his customers' purchases. However, this product still accounts for some 20% of all wrapping papers used.

Gummed paper tape and kraft mailing envelopes in combination account for some 7% of wrapping paper used. As hard as it may be to believe, gummed paper tape, such as is found in the shipping room, accounts for 4% of total use.

This, several years ago, represented the use of over 8,000 tons of paper per year.

The miscellaneous applications of wrapping papers — which account for 15% of the total—are many and varied.

They include papers coated or impregnated with wax, asphalt and other chemicals, paper that is twisted and then manufactured into carpet backing, seat covers and rugs as well as paper that is manufactured for spinning into yarns which are subsequently woven into fabrics.

Such fabrics find their way into manufacture of automobile seat covers, matting, window blinds and chair covers. Twine is also made out of kraft paper.

Shotgun Shells

In addition to the foregoing, kraft paper is used to form such items as shotgun shells, is used in the heel supports of many shoes and apart from the strengthening in book bindings, has many applications in the electrical industry.

Bleached or semi-bleached kraft has a host of household applications, particularly in towelling.

Bleached kraft paper bed sheets, tablecloths, dish towels and aprons have already been developed and industry enthusiasts foresee the day when these products will displace their current counterparts in the same way the paper napkin has largely displaced linen and cotton in the dining room.

Canadian wrapping paper production today comes from 12 mills located in Central Canada and British Columbia. In total they employ some 16,000 in the mills and forests. These mills represent a total capital investment of some $60 million.

In addition, three or four other mills produce small amounts of wrapping paper, often for their own use in wrapping their regular paper products.

The Paper In Packaging

	1945	1950	1955
		tons	
Wrapping	162,175	222,840	258,390
Liners	137,059	214,234	258,338
Container Chipboard	7,096	6,533	3,646
Corrugating Board	78,756	144,892	144,250
Folding Board for Boxes	125,691	157,690	185,660
Setup Board for Boxes	45,605	47,625	48,000
Other Boxboard	146,549	199,761	224,020

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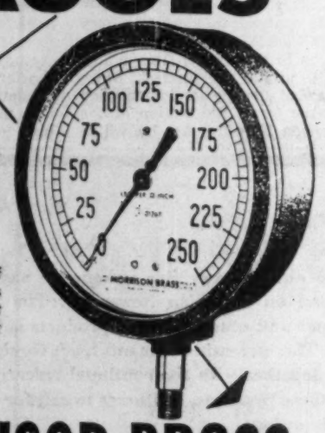

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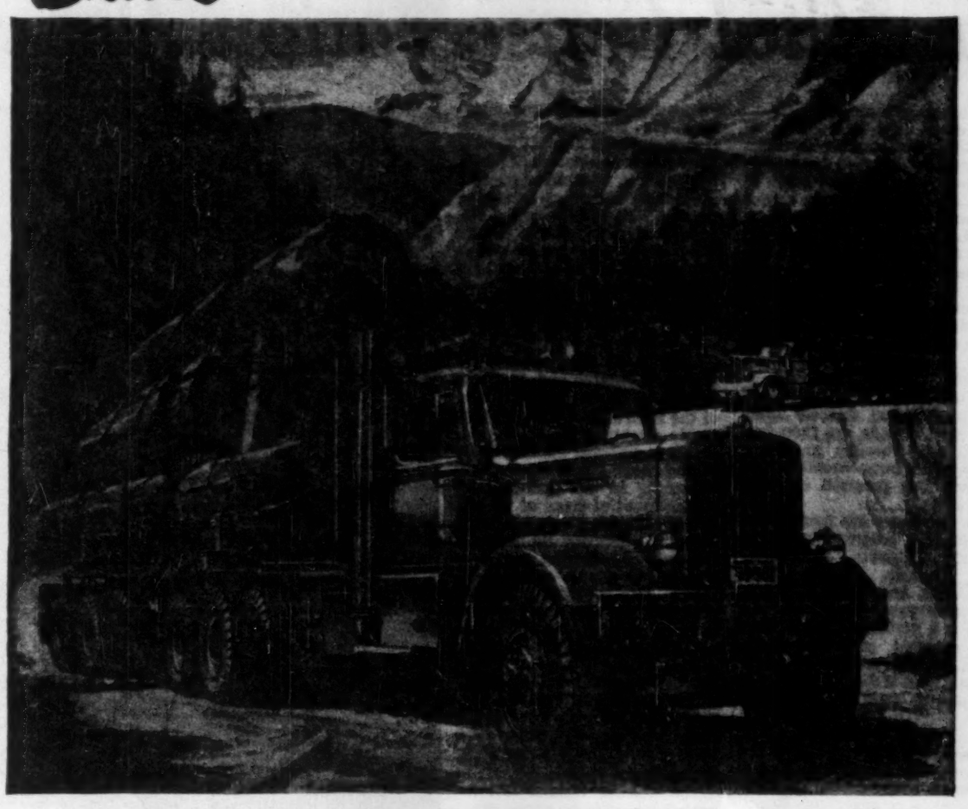

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THE GREAT LAKES PAPER COMPANY, LIMITED

FORT WILLIAM, ONTARIO

Forest Saved, Dollars Earned In Vital Conservation Policy

(Continued from page 59)

any other form of damage. In addition they permit foresters assigned by the tree farm committees to inspect their lands at least once a year, to offer advice and assistance to tree farm owners, and to check on compliance with minimum regulation.

The Tree Farm Movement has been sponsored locally by service clubs, such as Rotary or Chamber of Commerce, and in some cases has been taken up as local project by farm forum groups.

A number of the divisions of the professional forestry association of Canada, the Canadian Institute of Forestry, have also formed tree farm committees to develop this program in their own areas.

Six provinces are now enrolled in this program including British Columbia, Saskatchewan, Ontario, Quebec, New Brunswick and, more recently, Prince Edward Island. Owners receive a certificate when they are formally presented with their tree farm membership, and a metal sign is displayed on the roadside by each Canadian tree farm.

Royal Commissions

The practice of forest management has been investigated rather carefully during the past year by a number of Royal Commissions and other dominion or provincial groups appointed for this purpose.

There was the second session of the Sloan Commission in B. C., and Newfoundland Royal Commission on Forestry completed extensive studies and published a report under the chairmanship of Major-General Howard Kennedy. The reports of this commission contain a number of practical forest management suggestions which likely will be acted upon by the operating companies under the direction of the Provincial Department of Natural Resources at St. John's.

In New Brunswick, an important Forest Development Commission has been operating for the past two years under the chairmanship of Dr. John S. Bates, with E. S. Fellows as the permanent forestry-secretary of this commission. This group, appointed by the premier, John Flemming, of N. B., is not a Royal Commission in the usual sense but is an advisory board to the provincial government, working in close co-operation with private individuals and with forest industry.

The object is to improve the standards of management on provincial crown lands and on privately owned lands in N. B., by developing new markets, better mill techniques, a closer utilization of the wood that is cut and a development of uses for new timber species.

Closer utilization brings out one of the best examples of improved forest conservation which is being developed. Only about 30% of the tree that is cut in the woods ends up as a finished saleable product, while the rest of it is usually discarded as unused fibre material some place in the logging or manufacturing process.

Reduction in this heavy drain on the forest is a good step in forest conservation and closer utilization is being developed whereby the economics of the forest industry permits this increase of wood fibre.

Using Chips

Some of the first examples of good utilization were developed in B. C., where saw-logs were barked so that the resultant slabs and edgings could be put through a chipper and the chips then shipped to nearby pulp and paper mills. In some cases, large additions to existing pulp mills were completly supplied with their wood from the chips salvaged from slabs and edgings produced in nearby sawmills.

This trend is rapidly increasing and with improved log-barking machines even smaller sawmills may now install this equipment and be in a position to sell chips to the pulp mills in their vicinity.

One small sawmill in the Lake St. John area of Quebec was developed specifically for this purpose. Two brothers borrowed sufficient money to establish a sawmill with log barking equipment and the chips were put on railroad cars and sent to a nearby pulp mill instead of being burned or wasted as had formerly been the case. The sale of chips has been so profitable that the mill has been expanded and they are able to provide saw-logs cheaply for their customers because of the added profit they make from the sale of the chips, slabs and edgings to the pulp mill. One large sawmill in N. B. has recently been equipped with similar log barking equipment and again the chips are going into the nearby pulp mill at a profit. These examples point up the fact that increased production in pulp and paper may be achieved without any additional drain on the forest if the logs are barked before sawing and the slabs and edgings are then chipped for use in pulp and paper industry.

Many of these technical developments are brought about after the publication research results from the Forest Products Laboratory, one branch of which is located in Vancouver and the other main laboratory located in Ottawa. This activity of the Department of Northern Affairs and National Resources is one of the most useful fundamental research programs upon which forest industry depends for improved standards of operating and utilization.

The same department of Northern Affairs and National Resources, under the direction of the Hon. Jean Lesage, has recently established improved research facilities at the Petawawa Station near Pembroke for experiments in the growth and management of crops of timber. Under Director D. A. MacDonald of the Forestry Branch, this research organization has been built up to handle any type of forest research from studies with radioactive tracer elements in seed beds to the full-scale management of stands of timber under commercial operating conditions. The original emphasis of the station on forest fire protection has not been lost but the forest management practices are now coming more strongly to the front.

The Federal Science Service contributes strongly to the practice of forest conservation through its studies in forest insect control and the resultant recommendations for practices in the forests. The laboratory at Sault Ste. Marie under Dr. M. L. Prebble is one of the outstanding forest insect laboratories in the country.

Recently new substations have been developed in a number of areas, including Fredericton, N.B., and other stations are planned for Vancouver and for Val Cartier, Que.

Need for much greater federal contributions financially to the protection and management of Canada's forests was urged in papers presented at the National Forestry Conference in Winnipeg, Sept. 17 to 19 this year. This is the first National Forestry Conference which has been called in 50 years, the original conference having been held in Ottawa in 1906 at the request of the then Prime Minister of Canada, Sir Wilfrid Laurier.

In the present conference, the Canadian Forestry Association is co-sponsoring this national meeting with the Canadian Chamber of Commerce, the Engineering Institute of Canada and the Canadian Institute of Forestry as a means of increasing public information on the subject of Canada's forests and the value of this resource to the Canadian economy. Over 100 national organizations have been invited to send delegates and the proceedings will be printed and distributed as further public education on this important subject.

Another topic at the conference was the need for better "land use" planning, particularly in the opening up and settlement of new areas, for proposed agricultural development. In too many cases in the past, colonization or settlement has been done without adequate soil surveys and the investigation of the economic possibilities of agriculture for the area concerned.

The Canadian Forestry Association attempts to bring the facts to the attention of the Canadian public by every means possible in the interest of the best possible management of our forest resources. It is recognized that the forests are being used more and more extensively for recreation, and for hunting and fishing by the Canadian public and by our American visitors as time goes on. With increased development of forest roads for access and for protection, the population pressure on the forest will increase.

Under these circumstances it becomes increasingly necessary for the public to understand the need for extreme care with fire in the woods and for adherence to fish and game laws as they are developed for the maintenance of these recreational resources.

Forest management is now demanding greater re-investment in order to guarantee the crops which we will need more and more urgently in the years to come. Two developments during the past year have marked the seriousness with which forest management is now being considered by top executives of the forest industry.

A chair of forest biology was established at the University of Toronto through co-operation of the university with the Abitibi Power and Paper Co. Prof. J. L. Farrar now occupies this post which will permit a better training in the fundamentals of forest management and biological science for the coming professional foresters from this faculty devoted to the management of Canada's forest wealth.

In June, this year, Lowell Besley was engaged to become the chairman of the division of Woodlands Research of the Pulp and Paper Resarch Institute of Canada. This large and active research organization is a three-way partnership between the pulp and paper industry of Canada, the Federal Government and McGill University.

JETS OF WATER are sprayed on log piles during warm weather. This cuts down the fire hazard, and some papermen believe wetting slows down the rate of decay.

Its work in technical advancement in pulp and paper mill operations has achieved many advances and developed many processes which have been of great benefit to the member companies concerned.

The Division of Woodlands Research has been headed for many years by Alex Koroleff who has made contributions to woodlands research, particularly in the logging and mechanical equipment connected with the movement of trees and logs from the woods. The woodlands division, however, is considered to have been always less-heavily staffed and financed than the mill or technical section, as is generally true of all forest research across Canada.

Besley has had extensive experience in both the United States and Canada and until four years ago was head of the faculty of forestry at the University of B. C., where he took an active part in research connected with the West Coast forest industry.

For the past few years he has been back in his native United States as executive forester-director of the American Forestry Association where his administrative abilities are said to have revitalized that national public service organization. One of his most recent achievements before leaving the United States was the organization of the Southeastern United States Forest Fire Conference in New Orleans in April of this year.

In this appointment, public attention was again directed upon the forest management problem of reducing the excessive forest fire losses suffered by pulp and paper and lumber firms in the Southeastern U. S.

Strong action by law-enforcement agencies has arisen from the New Orleans Conference and the fire situation should be greatly improved as a result of this meeting of representatives from 22 southeastern U. S. states.

Many of the problems facing the woodlands division of the Pulp and Paper Research Institute will be problems of similar interest to the lumber industry and to owners of farm woodlots and privately owned tree farms. It is considered encouraging to see additional staff, financing, equipment and buildings being devoted to this "critical" matter of improved forest management and the work of Besley in the Pulp and Paper Research Institute will be watched with interest.

The question of forest fire protection is basic to any forest management program since if the forest is subject to extensive fire losses the development of any more intensive forest management cannot be justified. This subject has been repeatedly brought to the attention of federal and provincial departments and to the notice of the general public by public service groups such as the Canadian Forestry Association.

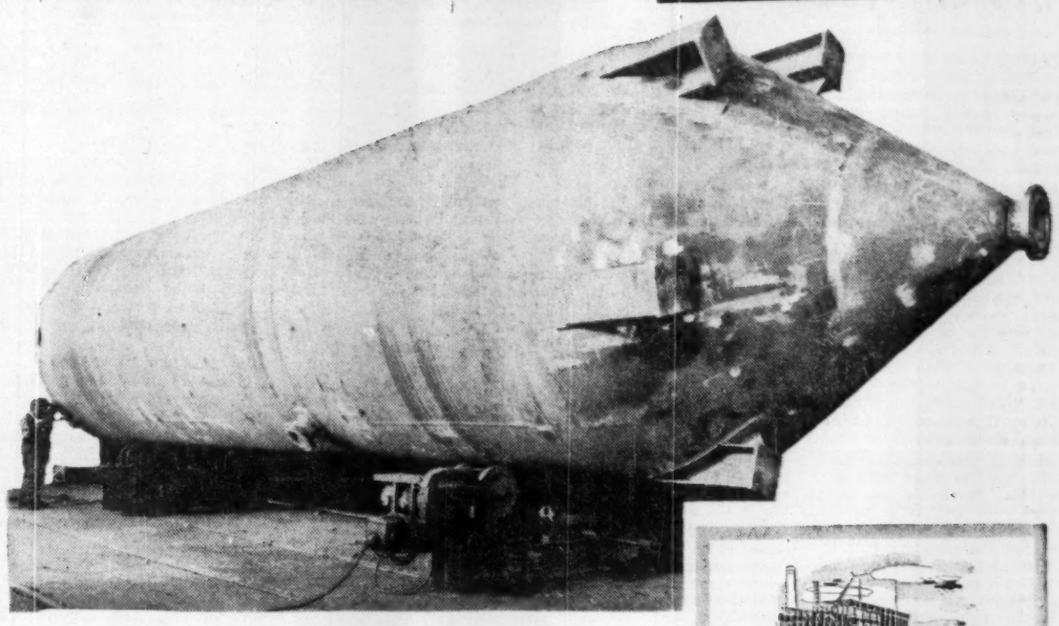
In the House of Commons, W. H. Herridge of British Columbia has brought this question of forest management and the need for increased protection to the attention of the House for many years. Also, Hon. Earl W. Rowe made a strong appeal in the House for greatly increased assistance to forest management and forest fire prevention by the Federal Government through increased financial contributions.

He pointed out that the Federal Government was the greatest single beneficiary in corporation taxes and other forms of income from the profits of forest industry.

In contrast, they return a very small amount of this federal income to the forests from which this wealth originated. Rowe pleaded for the implementation of the forest fire section of the Canada Forestry Act by which money could be made available on a matching basis to each of the 10 provinces for greatly improved forest fire prevention.

In addition, he pointed out the need for many more roads in the forest both for the profitable periodic removal of timber on shorter rotations and also as a means of entering the forest for fire prevention in seasons of high forest fire hazard.

A Canadian First!



In its close cooperation with the Pulp and Paper Industry, Dominion Bridge has produced several Canadian "firsts". A recent example is the Inconel-clad sulphate digester shown above.

Fabricated for Crown-Zellerbach's Duncan Bay, B.C. mill, the vessel has an inside diameter of 11 ft. 6 ins., is 54 ft. face to face of nozzles and weighs 48 tons. The corrosion resistant properties of the Incone cladding are expected to appreciably increase the life of this digester.

For complete information on Dominion Bridge Platework Service write for Catalogue No. PP-100 to the nearest branch of Dominion Bridge Company Limited. Plants at: Montreal • Ottawa • Toronto • Winnipeg • Calgary • Vancouver — Assoc. Company plants at: Amherst, N.S. • Quebec • Sault Ste. Marie • Edmonton.

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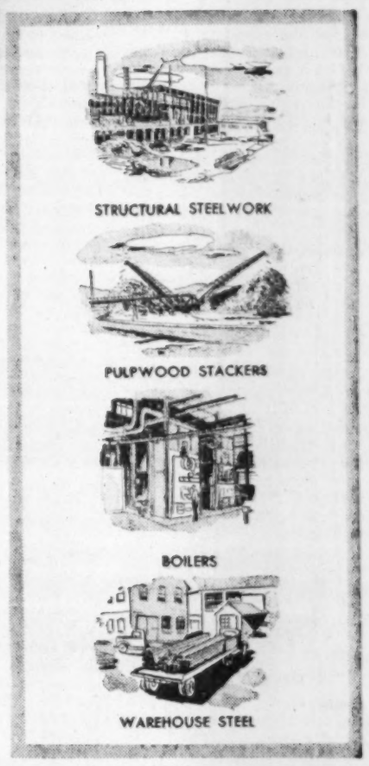
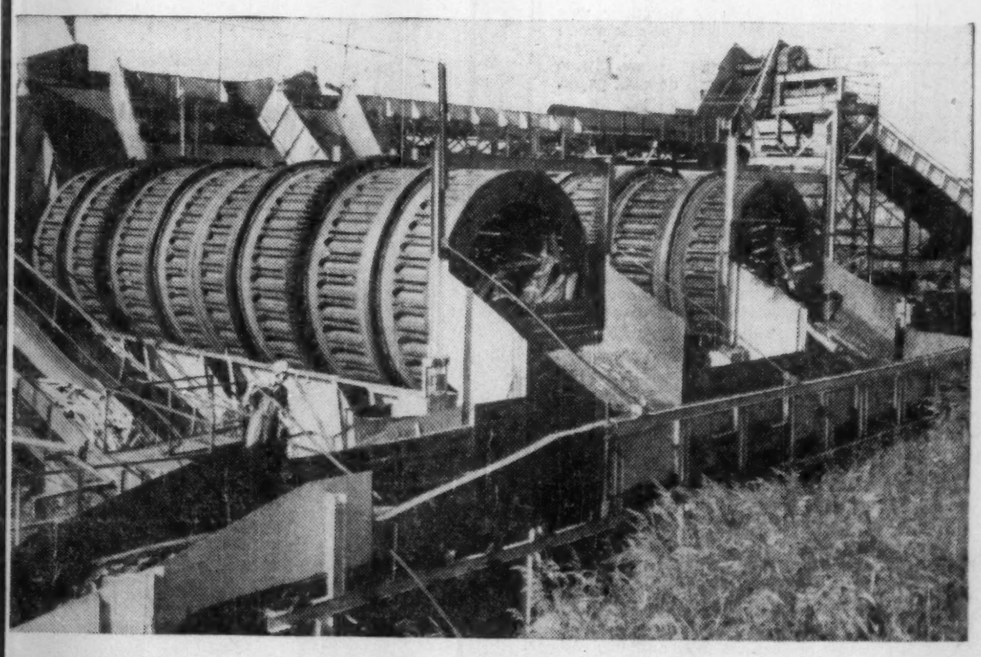


DOMINION BRIDGE COMPANY LIMITED

Serving the Pulp and Paper Industry

An installation of C-I-R "Weldrum" Barkers at an eastern Canadian mill.



WOODLANDS OPERATIONS — Portable compressors — Rock drills — Corset Jackbits — Pneumatic Tools

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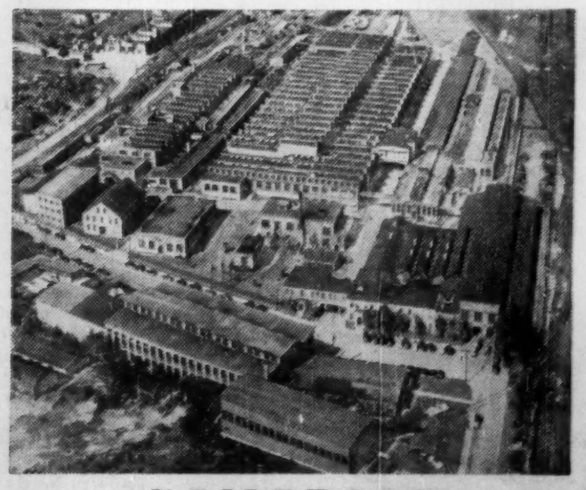

CANADIAN INGERSOLL-RAND

St. John's — Sydney — Sherbrooke — Montreal — Toronto — Kirkland Lake — Timmins — Winnipeg — Calgary — Nelson — Vancouver

P-131

Here's How Building Paper Companies Are Progressing

Arborite Co.

Arborite Co., a subsidiary of **Howard Smith Paper Mills Ltd.**, incorporated Nov. 14, 1947, as mass producers and custom-laminators to manufacture and sell decorative and industrial laminates. The former, marketed under the trade name Arborite, includes wallboards and table-top grades. The latter includes all NEMA grades which are used extensively for electrical and mechanical applications.

Company commenced operations in a temporary pilot plant adjacent to plant of the parent company at Cornwall, Ont. A new plant at Ville La Salle, Montreal, was completed and equipment transferred there by August, 1948.

No major projects were completed in 1955, but there were many minor modifications and refinements made which increased production and provided improved products. The steady expansion of the sale of arborite products has caught up to present equipment and space.

Plans were under preparation earlier this year for additional facilities in floor area to handle the expected future demand. Operating statistics of the company are consolidated along with those of Howard Smith Paper Mills Ltd., covered in the fine papers section of this issue.

To expand sale in the U. S., an arrangement was reached with **Consolidated Water Power & Paper Co.**, of Wisconsin Rapids, Wis., for manufacture in the U. S. of a product, similar to Arborite, th general name under which company products are sold.

For this purpose, a new company bearing the name of **Consoweld Corp.** was formed in which Howard Smith owns 26% of the issued capital stock. and Consolidated Water Power & Paper Co. 74% of the stock. A new modern plant for the manufacture of this product was placed into operation at Wisconsin Rapids, Wis., by Consoweld in 1954.

Building Products

Building Products Ltd. produces asphalt shingles and tiles, rolled-roofing felt, wallboard, insulating board and sidings, building papers, expansion joints, waterproof paint and cement, fire retardant coating, and allied products. Trade names include: B.P., Neponset, Rubberoid, Bird's, Vulcanite, Insul-Brick, Insul-Board, Dry Wall, Albi, etc.

Company markets over 50 different types of roofing and other building materials.

Since 1947 the company has been a prime distributor of Fiberglas building insulation, made by **Fiberglas Canada Ltd.**, Oshawa, Ont. The company carries on considerable export trade with Great Britain and other foreign countries.

At Pont Rouge, Que., company has a two-machine paper mill and ancillary facilities required for conversion of a portion of the paper output into wall and insulating board. Substantial additions are under way at this mill. At Montreal (Ville LaSalle) a roofing plant for production of asphalt roofings, shingles and sidings in various forms as well as the building papers is located.

Located at Hamilton, Ont., is another roofing plant with production similar to the one in Montreal, with the exception that production at Hamilton also includes asphalt floor tile. At Winnipeg, company has a one-machine mill with facilities for conversion of portions of the paper output into wall and insulating boards. At Edmonton a paper mill is operated to produce papers for further processing as well as products for sale to other paper consuming industries. It also operates roofing plants at Winnipeg and Edmonton.

In 1955 sales increased over the previous year but increase in volume was greater than increase in dollars. This was due chiefly to depressed price conditions in roofing materials in Eastern Canada for a great part of the year. This price situation, company reports, had an adverse effect on profits.

Sales for the first two months of this year, however, were reported to be higher than in the corresponding period last year.

Net profit in 1955 was $1,602,006 or $3.31 per share compared with $1,587,007 or $3.28 per share in 1954.

During the year contribution to profit of the Edmonton paper mill was less than anticipated, but steady progress was made toward solution of quality and cost problems, so that the outlook for this mill for 1956 is promising, the company states. At the year-end, company's new granule plant at Havelock had passed the break-in stage and was producing granules for company's own use as well as for sale elsewhere.

Net additions to fixed assets during 1955 totaled $756,966 and unexpended balance on approved capital projects at the year-end was $481,926.

Principal projects undertaken in 1955 included:

Completion of the granule coloring plant at Havelock.

Plant additions at Pont Rouge.

New warehouses at Winnipeg and Vancouver.

A substantial addition to warehouse facilities in Toronto.

Both the Winnipeg and Vancouver warehouses are erected on newly acquired land which is both advantageously located and provides sufficient area for future expansion as required.

A number of new projects, including additional production capacity for present products and additions of new products to company's line are under active consideration. Company reports it is constantly reviewing its line of products in order to keep the line modern and attractive.

Construction as a whole, and residential building in particular, established new records in 1955 into 1956, with the result that there was a greater carryover of houses under construction into 1956 than in previous years, according to President L. F. Long.

He said a high level of residential and other types of construction appeared to be assured for the early part of 1956, with the result that it is anticipated this year should produce a good volume of business for company's products.

In March of this year company shareholders authorized increase of share capital by 166,616 shares to bring company's total authorized share capital to 650,000. This move was made because all of company's then authorized 483,384 shares were outstanding and directors felt that it would be expedient to have shares available for future issue. Also instituted was a stock option plan for key employees covering 24,000 common shares.

Working capital as at Dec. 31, 1955, was $6,740,780 as compared with $6,238,935 a year earlier.

Donnacona

Donnacona Paper Co., Donnacona, Que., has manufacturing facilities which include insulating board mill with an annual capacity of some 100 million sq. ft. Control is held by **Howard Smith.**

Products of the board mill include rough cast and laminated insulating boards; roof insulation and plaster lath; rough cast, smooth, colored board; burl board for interior finishes; decorative specialties; Donnacousti sound-absorbing boards; asphalt-impregnated boards; refrigerator and special industrial boards; termiteproof board; and hard-pressed board and tile.

Screenings from new grinders flow to the insulating board mill, where new equipment and modifications have improved capacity and efficiency. For the main report on this company, see the newsprint section of this report.

Inter. Fibre Board

International Fibre Board, Ltd., is a subsidiary of **Canadian International Paper Co.** and manufactures "Ten/Test" insulating building board, a wood fibre product.

Plant is at Gatineau, Que., and produces some 135 million square feet annually. This includes "Ten/Test" insulating panels, roof board, asphalt sheathing, ceiling tile and Acousti Blocks.

Distribution of its products is made by **International Panel Boards Ltd.**, another subsidiary of CIP.

Capitalization includes $1.5 millions of cumulative $100 par first preferred outstanding, and 10,000 npv common shares.

The company has a subsidiary, **Tentest Fibre Board Company Ltd.**

Operating figures are consolidated along with those of International Paper Company figures.

Masonite Co.

Masonite Co. of Canada Ltd. is a joint undertaking of **Canadian International Paper Co.** and **Masonite Corp.** formed in 1939.

It manufactures all grades and types of hardboard products for sale in Canada and export markets other than the U. S. Production of Gatineau plant is approximately 115 million square feet per year of all kinds and grades of "Masonite" brand board, consisting of Masonite Presdwood, both standard and tempered; Quartrboard; Temprtile; and Century of Progress Flooring.

The Gatineau plant cost about $600,000 and has been in operation 16 years.

Authorized and outstanding stock includes one million shares, no par value, half of which are owned by Canadian International Paper Co.

Individual financial and operating statements are not submitted for publication.

St. Regis Paper

St. Regis Paper Co. (Canada) Ltd., wholly owned subsidiary of **St. Regis Paper Co.**, New York, operates a plastic plant at St. John's, Que.

Its operation there includes a plastics plant which commenced operation in June, 1951, which produces laminated sheets, rods, tubes, molded and fabricated parts, decorative sheets and paneling. Panelyte is the company's trade name for its plastics. This Panelyte plant uses paper, fabric and chemicals produced in Canada.

For the main article on this company see the board, tissue and specialty paper section of this issue.

Sidney Roofing

Sidney Roofing & Paper Co., Victoria, manufactures asphalt shingles and rolled roofing, insulated sidings, building papers, paperboard and cartons. It distributes construction materials such as insulating materials and wallboards.

Over 82% of the capital stock, including all the Class B stock is owned by **Eddy Paper Co.**, Hull, Que.

Plants are located at Victoria and Vancouver; Lloydminster, Alta.; London, Toronto, and Mimico, Ont.; and Port Neuf, Que. Sales offices are maintained in 12 cities across the country.

Wholly owned subsidiaries include **National Paper Box Ltd.** and its wholly owned subsidiary **Vancouver Paper Box Co., Sidney Products Ltd., Bishop Asphalt Papers Ltd.**, and **Port Neuf Investments Ltd.**

With acquisition of Bishop Asphalt early in 1955, Sidney now operates on a national scale.

Sidney this spring began construction of its $5 million roofing material plant on a 55-acre site in Burnaby, on the B. C. mainland. Company plans eventually to invest $7.5 million in this plant. Initial stage includes installation of a six-cylinder paperboard machine with all necessary stock preparation equipment, power services and an administration building. Company expects to complete this phase before mid-1957. Sidney is planning further steps and expects to complete entire program by end of 1958.

Sidney undertook extensive changes both in west and east costing $686,000, in addition to acquisition cost of eastern subsidiaries' stock. Company spent $240,000 on Bishop's plants at London, Ont., and Portneuf, Que. Resulting economies should equal capital outlay within three years.

Estimated capital expenditures for 1956 are $3,250,000, including first phase of mainland expansion scheduled for completion by end of this year. Company estimates an additional $3 millions will be required for all branches in 1957 and 1958, but plans for whole program are not complete yet.

Sidney expects to benefit this year from Bishop acquisition as well as from its own expansion.

Consolidated net profit for 1955 was $519,683, 24.8% higher than net profit of $416,578 in 1954. Earnings were equal to $10.39 ($8.33 a year earlier) per Class A share and $4.75 ($3.72) per Class B share. Dividends of 90c were paid on the A shares in both years, and none on the B shares.

Expanded sales volume was achieved in all branches and prices were generally higher, said Vice-president and General Manager J. A. Craig. Roofing division showed higher sales volume in west and east.

Converting division (consisting of National Paper Box Ltd. and its subsidiary, Vancouver Paper Box Co.) had a record year with substantial sales increases. Increasing integration should produce still further economies, it is stated.

Primarily to provide funds for expansion, Sidney issued $7 million 4½% first mortgage and collateral trust bonds, including $5 million 20-year sinking fund and $2 million serial bonds due 1958-65. Sidney used over $3 millions to retire Bishop Asphalt preferred stock and bonds and bank loans of both companies. Balance of $3.8 million will be available for general corporate purposes, including expansion on B. C. mainland.

Capitalization outstanding at Dec. 31, 1955, included $2 million 4½% serial bonds, due Sept. 1, 1958-65; $5 million 4½% sinking fund bonds, due Sept. 1, 1975; 50,000 Class A shares, no par; and 100,000 Class B shares, no par.

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NEW GLASGOW

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Progress Reports of Wood Pulp Firms Reveal Persistent, Healthy Growth

Abitibi

Abitibi Pulp & Paper Co., directly and through subsidiaries, manufactures newsprint, sulphite pulp, printing and fine papers, and paperboard. Mills are at Iroquois Falls, Sault Ste. Marie, Fort William, Port Arthur and Smooth Rock Falls, Ont., Pine Falls, Man., and Beaupré, Que. Sulphite mills are located at Smooth Rock Falls and at Sault Ste. Marie.

Market conditions throughout the world for wood pulp have improved substantially since 1954, and price levels have shown a corresponding increase.

Production of bleached sulphite and other pulps totaled 65,504 tons in 1955 compared with 63,617 tons in 1954. The pulp market is continuing strongly in 1956, President D. W. Ambridge said recently, and company is having no difficulty in disposing of all its production of market pulp at substantially higher prices.

Abitibi owns a 10% interest in **Alaska Pine & Cellulose Ltd.** which operates pulp mills on the Pacific coast.

For the main report on Abitibi, see the newsprint section.

Alaska Pine

Alaska Pine & Cellulose Ltd., Vancouver, B.C., produces dissolving and bleached sulphite pulps, 10% of which is used in fine paper making, the remainder in manufacture of rayon and staple fibre.

Company is 80% owned by **Rayonier Inc.** of New York, 10% by **Abitibi Power & Paper Co.**, and 10% by the Koerner interests of Vancouver.

In 1955, Alaska Pine sold 247 million board feet of lumber and 137,000 squares of red cedar.

Plans were announced last fall for expenditure of an additional $6 million for a new pulp drying machine and finishing room at the Port Alice mill. Plans also called for the construction of a $1 million Rayflo plant at the company's Marpole division.

Capitalization outstanding at date of latest public annual report (Dec. 31, 1954) consisted of $12,270,000 4½% sinking fund bonds, series A, due 1966, which were called for redemption in May and September, 1955; $1,650,000 5% cumulative preferred stock, $100 par; and 100,000 npv common shares.

The two minority shareholders have the option of exchanging their 10,000 shares of Alaska Pine in 1957 for 125,000 common shares of Rayonier Inc.

Anglo-Canadian

Anglo-Canadian Pulp & Paper Mills Ltd. produces unbleached sulphite pulp at its Quebec City mill.

Annual capacity amounts to 65,000 tons of unbleached sulphite pulp in excess of capacity requirements for newsprint. Actual production in 1955 amounted to 61,289 tons of unbleached sulphite pulp, up from 58,700 tons in the previous year.

For main Anglo-Canadian coverage see newsprint companies section.

Bathurst

Bathurst Power & Paper Co. produces unbleached sulphite pulp for sale at its mill in Bathurst, N.B. Rated annual capacity of the pulp dryer is 24,000 tons. The company also produces kraft pulp, semichemical pulp and groundwood pulp for its own use.

The semichemical pulp mill uses hardwoods as a raw material for the manufacture of BCM, a specialty corrugating medium first introduced and manufactured in Canada in 1951 by Bathurst.

On Oct. 1, 1955, the selling price of unbleached sulphite pulp for export increased by $5 per ton. Despite this increase, the selling price is claimed to be comparatively low in relation to the cost of production. Demand for unbleached sulphite pulp remained firm throughout 1955 although the price and market for this product still continued to be affected by the supply and price levels of bleached pulps, the annual report said.

Total production by company mills during 1955 was 152,250 tons, a new record, against 147,579 tons in 1954. Output of the sulphite pulp mill was 19,024 tons, slightly lower than for the previous year. The quantity of unbleached sulphite pulp consumed in the manufacture of the products of the company increased during the year, thus reducing the quantity available for sale. This reduction was practically offset by the production in 1955 of groundwood pulp for sale.

For the main report on this company, see section covering paperboard mills.

Bowater's Nfld.

Bowater's Newfoundland Pulp & Paper Mills Ltd., produces a large amount of sulphite pulp at its Corner Brook, Nfld., newsprint mill. It owns a 150-in. sulphite pulp drying machine with an aggregate daily capacity of 175 tons or about 55,000 tons per year.

Company's six newsprint machines have a current annual capacity in excess of 310,000 tons and pulp production surplus to requirements for the manufacture of this amount of newsprint total about 50,000 tons.

Last year considerable expansion of the plant was completed and included the installation of a line of four new grinders. Further development of a high-yield sulphite pulping process and output of the pulping plant are being raised and, by shortening the length of the cooking process, a reduction in the volume of wood and quantity of chemicals consumed in the making of a given tonnage of sulphite pulp will be achieved.

Nearly th entire production of the company has been sold under long-term contracts with the bulk of the sulphite pulp and pulpwood going to associated mill companies in Britain.

In 1955 company's mills at Corner Brook operated to capacity throughout the year, the highest rate of production yet achieved, with the result that more than 500,000 cord. of wood were cut. About 100,000 cords of wood were cut for associated mills in the U. K.

Brown Corp.

Canadian properties of **Brown Corp.** were acquired by **Canadian International Paper Co.** on Dec. 1, 1954.

Properties included the La Tuque, Que., pulp mill which at the time of purchase had a capacity of 175,000 tons of premium kraft pulps, of which 165,000 tons are high-grade bleached kraft pulps, and 2,453,973 acres of timber land.

Purchase price of $39,250,000, exclusive of certain adjustments, was paid from cash resources.

Brown Co. currently has numerous projects under way. These include: a new chlorine dioxide plant which will be the first of its kind in North America; a new sulphite waste liquor recovery system, the first of its kind in the Eastern U. S.; new sulphite pulp indirect cooking system; additional chip-handling capacity; additional storage space for the kraft pulp mill; a new kraft raw stock screening system; new pulp finishing and shipping facilities and a new 7,500-kw turbine generator. In addition several other projects are being planned or considered. They include: new wood-handling system; additional paper machine capacity; additional pulping capacity; refuse burning and steam generating equipment, and a resin plant.

The company's goal, according to President A. E. H. Fair, is to make earnings by 1957 equal to those of both the company and its Canadian subsidiary in 1954. None of the projects listed to date have given any indication the company is planning to expand its operations back into Canada.

Consolidated net income of the Brown Co. and Brown Corp. for the year ended Nov. 30, 1955, was $2,030,199 (81c per common share) compared with $3,411,175 in 1954. In 1954 larger share of company's earnings were derived from Canadian operations. Net income for the 28 weeks ended June 16, 1956, was $1,107,135 or earnings of 43c per common share compared with net income of $709,546 or 23c per common share in corresponding period ended June 11, 1955. Net sales for the half year at $30,597,864 were up $3.1 millions or 11.6% over the previous half year.

Can. International

Canadian International Paper Co. produces large amounts of bleached sulphite pulp for sale. The company is a wholly owned subsidiary of **International Paper Co.**, New York.

The company's Kipawa sulphite mill at Temiskaming, Que., has three pulp-drying machines with a total daily capacity of about 440 tons of high-grade bleached sulphite pulp (135,000 tons annually on a 308-day basis). The Hawkesbury sulphite mill at Hawkesbury, Ont., is equipped with two pulp-drying machines with a daily capacity of around 245 tons of high-grade bleached sulphite (75,500 tons on a 308-day basis).

An extensive rebuilding program at Hawkesbury was completed at the end of 1952. The mill is now producing a special new grade of hardwood dissolving pulp that was developed at the adjacent laboratories of the company's wholly owned subsidiary **Industrial Cellulose Research Ltd.**

At the Gatineau newsprint mill, about five miles below Ottawa on the Ottawa river, company has capacity for producing about 215 tons daily of bleached sulphite pulp (66,200 tons on a 308-day basis).

Some bleached sulphite is used by paper mills of the parent company, International Paper Co., in the northern U. S. Outside sales are all made under long-term contracts, with over 70% going to the U. S.

For the main coverage on Canadian International Paper Co. see the section under newsprint companies.

Columbia Cellulose

Columbia Cellulose Co. is a subsidiary of **Canadian Chemical & Cellulose Co.**, a holding company formed in 1951 to consolidate all the Canadian operations controlled by **Celanese Corp. of America.**

Columbia Cellulose Co. began manufacturing operations in 1951 at a $29 million plant on Watson Island, just south of Prince Rupert, B.C. Original plans were for an output of 200 tons per day of high alpha pulps.

Expansion of mill's productive capacity to its present 300 tons per day involved expenditures of an additional $16 million. It increased mill's output of high alpha pulps and also made possible simultaneous manufacture of other grades of pulps.

Company's production of dissolving pulps is mainly used for the manufacture of textile fibres and plastics. The mill supplies the requirements of its affiliate, **Canadian Chemical Co.**, at Edmonton as well as plants of the Celanese Corp. of America and other manufacturing companies.

Capitalization as at Dec. 31, 1955, comprised of first mortgage bonds; 3½% series A due 1957-1958—$5 million issued of which $1,250,000 were outstanding; 4½% series A due 1965 of which $10 million were issued and $9,920,000 outstanding. The general mortgage bonds, 5% series A due 1968 of which $5 million were issued and 3,800,000 outstanding; 100,000 shares of 5% preferred stock ($100 par), issued and outstanding and 100,000 shares of common stock ($100 par) issued and outstanding. All of the preferred and common shares are owned by the Canadian Chemical & Cellulose Company Limited.

Through a forest management license granted by the British Columbia Government, company holds a tract of 660,000 acres of timberland north of the mill location, sufficient in size to maintain anticipated pulp mill capacity in perpetuity. Company has received assurances that if it is shown the area covered by the license will not support a 300-ton-per-day plant, additional timber will be added from other available areas. In addition, timber is available for purchase from independent loggers, it is reported.

In 1955, parent company, (which includes **Canadian Chemical Co.** at Edmonton, sustained a consolidated net loss of $1,542,612 as against $5,202,957 in the preceding year.

Depreciation increased to $6.2 million from $5.2 million in the previous year, while interest and amortization decreased to just over $3.9 million from $4.1 million in the previous year.

For the first six months of this year consolidated net profit was $310,919 compared with a loss of $970,072 in the corresponding period last year. Net sales for the first six months at $19.6 million compared with $18.2 million in the corresponding period last year.

Last year, shareholders of Canadian Chemical and Cellulose approved a reorganization of company's capital structure involving conversion of all of company's outstanding preferred shares into common, and surrender for cancellation of 825,000 common shares by company's principal shareholder Celatino, S.A. This had the effect of eliminating the accumulated deficit incurred in establishing the operations.

Cons. Paper

Consolidated Paper Corp., one of Canada's largest producers of newsprint, also makes a substantial quantity of kraft pulp for sale at the Wayagamack Division.

Kraft pulp capacity for 1956 amounts to 14,168 tons.

Sulphite pulp is produced at the Laurentide Division, Grand-Mère, Que., and Port Alfred, Que., divisions, while kraft pulp is produced at the Wayagamack Division, Three Rivers and Cap de la Madeleine, Que., which also produces groundwood pulp.

The company has experimented successfully with the manufacture of "high yield" sulphite pulp, which resulted in the development of process yielding about 30% more pulp from a given quantity of wood. When the three mills, including Betgo Division, which produce sulphite pulp are equipped to operate by this process, there will be a saving of approximately $2 million annually.

The adoption of the "high yield" sulphite pulp process, possible utilization of hardwood pulp and by increased yield from present forest areas, will provide for future pulpwood growth a saving of 50,000 cords of pulpwood annually.

For the main report on this company see newsprint section of this report.

Donnacona

Donnacona Paper Co. produces a substantial amount of sulphite pulp at its Donnacona, Que., mill as well as having large newsprint and insulating board operation.

About 65% of its sulphite pulp available for sale is sold in the U. S.

Virtual control of the company was acquired by Howard Smith Paper Mills Ltd. in 1948 through purchase of shares. It has acquired further shares since then and now owns some 97% of the 379,532 outstanding common shares.

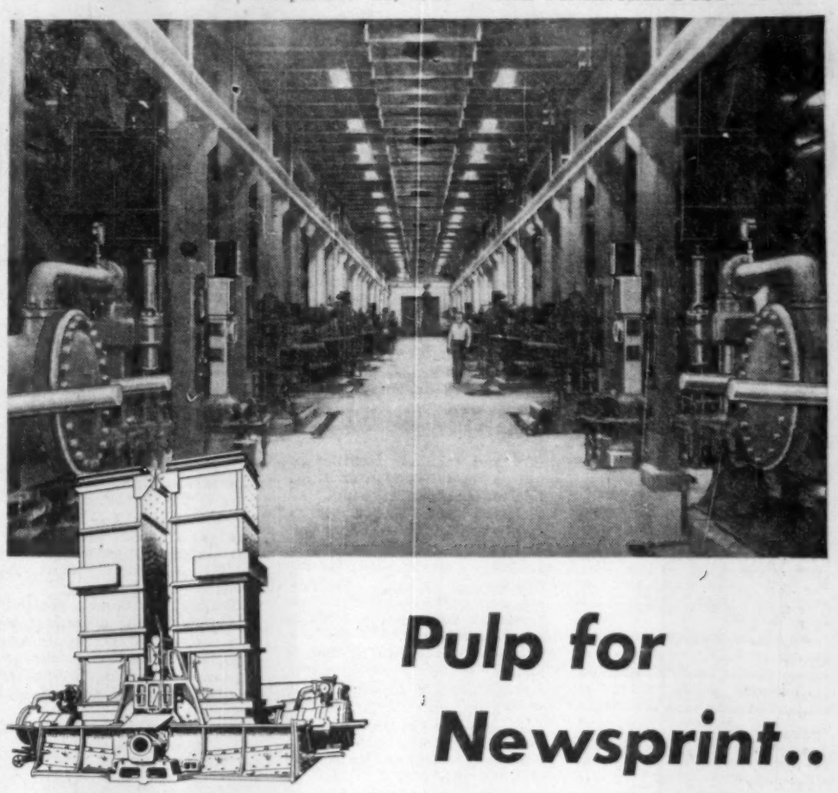
For the main report on this company see the newsprint section of this report.

Fraser Cos.

Fraser Cos. turns out a large amount of pulp for sale chiefly through its wholly owned subsidiary, **Restigouche Co.** In addition it produces paperboard principally for the domestic market. Another subsidiary, **Fraser Paper Ltd.**, manufactures paper in Madawaska, Maine, chiefly for the U. S. market.

Restigouche has a sulphite pulp mill at Atholville, N.B., producing paper and dissolving

(Continued on page 65)



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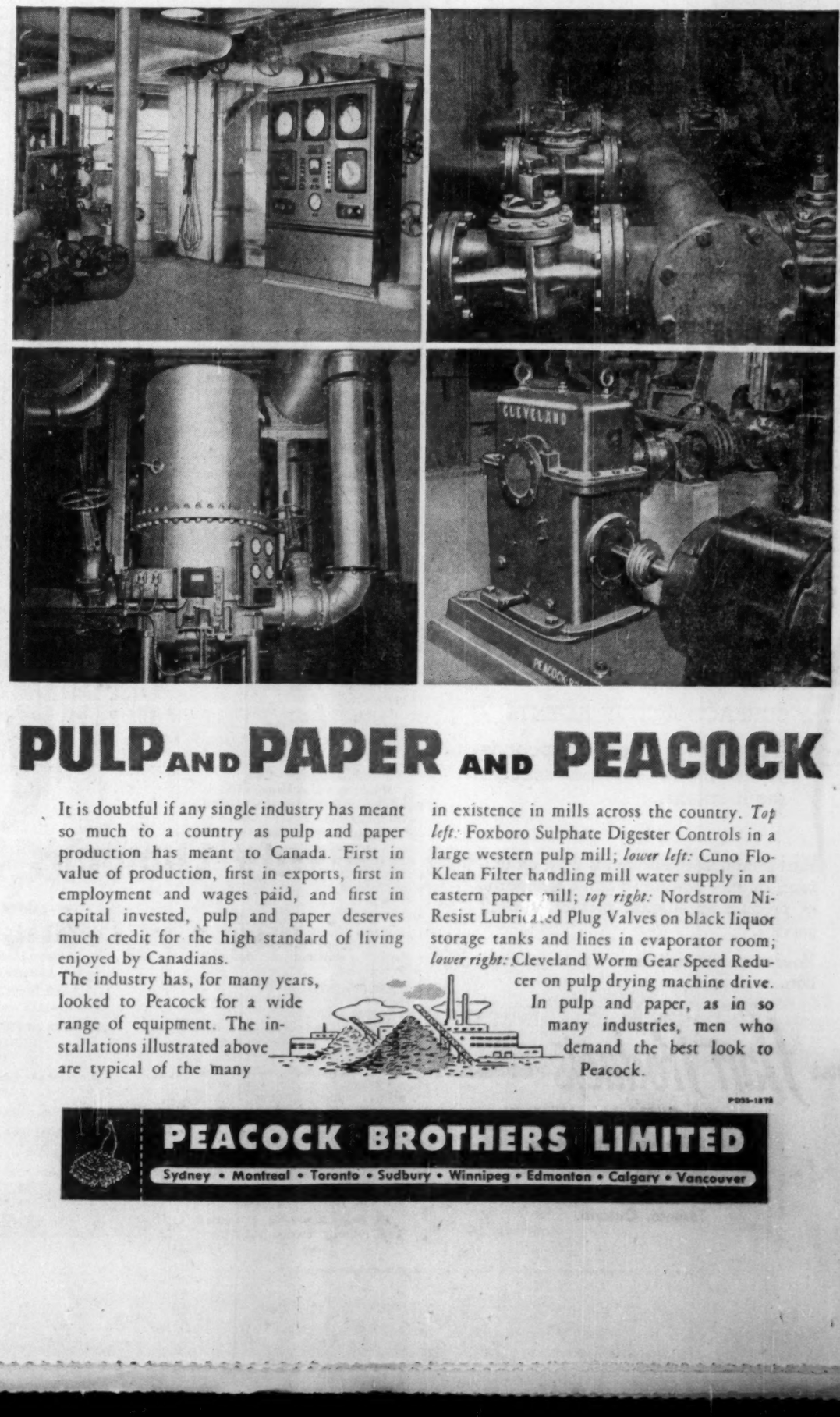

PULP AND PAPER AND PEACOCK

It is doubtful if any single industry has meant so much to a country as pulp and paper production has meant to Canada. First in value of production, first in exports, first in employment and wages paid, and first in capital invested, pulp and paper deserves much credit for the high standard of living enjoyed by Canadians.

The industry has, for many years, looked to Peacock for a wide range of equipment. The installations illustrated above are typical of the many in existence in mills across the country. *Top left:* Foxboro Sulphate Digester Controls in a large western pulp mill; *lower left:* Cuno Flo-Klean Filter handling mill water supply in an eastern paper mill; *top right:* Nordstrom Ni-Resist Lubricated Plug Valves on black liquor storage tanks and lines in evaporator room; *lower right:* Cleveland Worm Gear Speed Reducer on pulp drying machine drive.

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Wood Pulp Companies Report Healthy Progress

(Continued from page 64)

type pulps. At the present time, the daily capacity of the mill is approximately 265 tons of paper grade pulp or 200 tons of dissolving grade pulp for ultimate manufacture into rayon, cellophane, and plastics.

At Newcastle, N.B., Fraser Cos. manufactures unbleached kraft pulp. Since mid-year, the capacity of the mill has been about 180 tons a day. The major portion is shipped to Edmundston for bleaching and subsequent blending with other pulps for use in the paper mill in Madawaska, Maine.

At Edmundston, N.B., the company operates sulphite and groundwood pulp mills, sulphite and kraft bleaching plants, and a paperboard mill. The pulp mills prepare the raw material for the Madawaska paper mill. The daily capacity of paperboard is 85 tons.

The company has developed a hydro-elect ic site of 2,000 hp. installed capacity at Edmundston. The greater part of the power for the Edmundston operation is obtained through **Gatineau Power Co.**'s power plant at Grand Falls, N.B., over the company's own transmission lines. Mills of the subsidiaries, Fraser Paper Ltd. and Restigouche Co., are supplied with power from their own steam turbine generators.

Sales of the company's products last year included 273,169 tons of pulp, paper, and paperboard (253,668 tons in 1954).

Demand for various grades of products manufactured by the company during the first six months of the year have been sufficient to permit all the mills to operate at high levels. The profit for the first six months of 1956, after all charges, was $3,388,077 as compared with $2,383,894 for the same period in 1955.

Gaspesia

Gaspesia Sulphite Co. is a wholly owned subsidiary of **Anglo-Newfoundland ment Co.** A modern bleaching plant is now producing a high grade of bleached sulphite pulp at its mill in Chandler, Que.

The mill has an annual capacity of 90,000 tons of bleached sulphite pulp and produced 79,774 tons or 5,688 tons more than in 1954. Of this total, 22,764 tons was unbleached sulphite pulp and 57,010 tons bleached pulp.

Price of each product was increased by $10 per ton during 1955. The higher proceeds obtained from sales were partly offset by increased costs of raw material, chiefly pulpwood. The annual report in April said prices and demand for immediate future appeared firm.

Consolidated net profit of A.N.D. in 1955 was $4,632,139 compared with $3,631,516 in 1954. Gaspesia share in the net profit was $413,574 against $358,480 in 1954.

Great Lakes

Great Lakes Paper Co., Fort William, Ont., manufactures newsprint and unbleached sulphite pulp at its plant on the Kaministiquia River. Production of pulp in 1955 jumped to 44,056 tons valued at $4,666,000, well above 1954's production of 20,024 tons valued at $2,094,033.

Unbleached sulphite prices advanced twice in 1955—by $5 a ton in January and again in October.

Company made its first direct ocean shipment of pulp last year, shipping 1,400 tons directly from its mill dock to Spain.

Although annual saleable capacity of company's mills now totals 64,000 tons of sulphite and other wood pulp, this will be reduced to 24,000 tons by 1958 to make room for vastly expanded newsprint production capacity.

For the main report on Great Lakes, see the newsprint section.

Howard Smith

Howard Smith Paper Mills Ltd., the largest Canadian producer of fine and specialty papers, has also large manufacturing facilities for various types of pulp.

Combined annual capacity for sale of all plants owned or controlled by the company include 65,000 tons of bleached and unbleached sulphite pulp, 45,000 tons of bleached soda pulp, 19,000 tons of bleached and unbleached groundwood pulp.

Pulp production totaled 412,982 tons last year, an increase of 13.2% over 1954. About two thirds of this total was consumed in company's own paper mills and one third sold in the domestic and export markets. The annual report said that at that time there were prospects of continuing heavy demand for company's pulps.

Consolidated net profit for the year was $6,146,659 against $5,020,256 in 1954. For details on financial position and operations of Howard Smith see fine paper section of this issue.

Howe Sound

Howe Sound Pulp Division of **Canadian Forest Products Ltd.** operates an unbleached kraft pulp mill at Port Mellon, B.C. The plant was purchased in 1951 by a group consisting of Canadian Forest Products Ltd. and associates, from **Sorg Pulp Co.**, a subsidiary of **Sorg Paper Co.** of Middletown, Ohio.

A semibleach plant was installed in 1953 when Canadian Forest Products Ltd. assumed full financial control of the mill and made it one of its divisions. This enabled Howe Sound to produce semibleached and unbleached kraft.

Canadian Forest Products also operates a large plywood and hardboard division, and a lumber and shingle division, both of which derive their requirements of logs from the company's extensive forest and logging operations and, to a lesser extent, from independent loggers.

Irving

Irving Pulp & Paper Ltd. own and operate a pulp mill at Lancaster, N.B., at the mouth of the Saint John River. Company's name was changed from Saint John Sulphite Ltd., in 1951.

Company's fully bleached sulphite mill construction and expansion program is now practically completed. The company is now producing at the rate of 210 to 220 tons of fully bleached sulphite per working day. During the past year, capacity has been increased by 4,500 air dry tons per annum.

Company owns approximately 120,000 acres of timberlands in New Brunswick and the State of Maine estimated to contain 656,509 cords of spruce, balsam, plus stands of pine, cedar and hardwood. Irving also owns 544 preference and 34,585 common shares of the 1,725 preferred and 118,800 common issued shares of Allagash Land Co., which owns 85,144 acres of timberland in Maine.

Company does not publish financial and operating statements.

KVP Co.

KVP Co., a subsidiary of **Kalamazoo Vegetable Parchment Co.**, Kalamazoo, Mich., produces bleached, semibleached, and unbleached kraft and groundwood pulp in its mills at Espanola, Ont. Paper production includes wrappings, bag stock, waxings, coating, hanging, specialties, and a small amount of newsprint.

Its holdings are operated under a forest management contract of 21 years, with option to renew for additional periods of 21 years each. Among the conditions stipulated in the contract with the Crown are the cutting of minimum and maximum quantities of pulpwood, building of roads necessary to reach mature timber, and preservation of forest resources.

The program is designed to supply a major portion of KVP's pulpwood requirements in perpetuity.

The Espanola property was purchased from Abitibi Power & Paper Co. in 1943 for $1 million. A parchment processing plant was added in 1952.

Consolidated net sales of the parent company rose to $48.7 million in fiscal year ended Sept. 30, 1955, an increase of 9.1% over the previous fiscal year. Net earnings were $2,314,000, up from $2,202,000 the previous year.

Consolidated assets of the parent company at Sept. 30, 1955, were $35,241,891. The consolidated Canadian subsidiaries had assets of $12,864,281.

Net earnings of the Canadian subsidiaries were $981,055 before deducting exchange adjustments of $53,709. In 1953-54, net earnings of these subsidiaries were $882,624 before deducting $47,965 in exchange adjustments.

Paper production of the Canadian subsidiaries last year totaled 28,053 tons, most of it for conversion in KVP plants. New monthly tonnage records were established at Espanola. Capital expenditures for Canadian operations totaled $952,333.

To encourage home ownership at Espanola, company sold 36 homes to KVP employees and other townspeople. In addition, 14 new homes were built by individual owners in the area.

LongLac

LongLac Pulp & Paper Co. is a wholly owned subsidiary of **Kimberly-Clark Corp.**, of Neenah, Wis. It operates a kraft pulp mill at Terrace Bay, Ont., on the Lake Superior north shore, with a daily capacity of 330 tons of bleached sulphite pulp. Production is shipped to the parent company's mills at Kapuskasing, Ont., and in the U. S.

Company's mill is at the southern end of the water system which carries logs from the timber limits at Long Lac 80 miles to the north, where company's woodlands are located.

Sales of LongLac Pulp & Paper in the year ended April 30, 1956, were 1.5% higher than in the previous year, while net earnings increased 16.7%. The improvement in earnings was attributed mainly to the lower discount on the U. S. dollar, to improved operations, and to higher investment income.

Normal depreciation of $1,740,168 and excess depreciation of $977,594 were taken. After seven and a half years of operation, the company's plant is written down to 39.5% of its original cost.

During the year $800,000 of company's 3% bonds were retired.

Consolidated sales of Kimberly-Clark Corp. and subsidiaries rose to $253.7 million in the fiscal year ended April 30, 1956, from $179.1 million the previous fiscal years. Earnings rose to $21,617,795 or $2.82 a share from $12,757,437 or $2.84 on each share then outstanding in the 1954-55 fiscal year.

MacM. & Bloedel

MacMillan & Bloedel Ltd., Vancouver, is one of the world's largest manufacturers and exporters of timber products. Company controls a fully integrated lumber operation from standing timber to the sale of the finished product. Its two kraft pulp mills have become increasingly important to company's operations.

Company is largest Canadian producer of plywood, turning out about one third of Canada's total output.

MacMillan & Bloedel holds two forest management licenses on the west coast of Vancouver Island covering 762,361 acres. It handles the sales of **British Columbia Forest Products** on a fee basis.

Company's largest operating division is Western District Sawmills at Port Alberni, B.C., which produces between 80 million and 120 million feet board measure per annum.

The Alberni plywood division operates a plant with an annual capacity of 80 million square feet of ⅜-inch three-ply plywood. Another plywood plant at Vancouver has an annual capacity of 100 million sq. ft. and also manufactures 500,000 plywood fir doors per year under the Monodor brand.

Kraft pulp is produced by the Harmac pulp division near Nanaimo, and by the Alberni Pulp & Paper division.

A subsidiary, Canadian Transport Co., conducts a general shipping business, and handles the export business of the company. Various sales branches throughout the world conduct the company's marketing operations, except in the U. S. where a subsidiary company in Seattle handles merchandising.

MacMillan & Bloedel was formed in 1951 as the result of a merger of H. R. MacMillan Export Co. and Bloedel, Stewart & Welch Ltd.

In the nine months ended June 30, 1956, company's sales totaled $132.7 million, up slightly from $132.3 million in the corresponding 1954-55 period. Depreciation rose from $4.7 million a year ago to $7.3 million in the current fiscal year, largely as a result of provision for depreciation on the expansion work in progress at the Alberni Pulp & Paper division.

Income taxes at $11.7 million were nearly $750,000 less than in the previous year.

Net income of $13,221,209 or $2.50 a share was 4.3% lower than $13,808,802 or $2.61 a share in the corresponding period a year earlier.

Company recently announced plans to spend an additional $1,250,000 on the new $42-million bleached kraft pulp mill at Harmac. The additional amount is for a woodroom to allow wider use of wood products.

Other phases of the $63 million expansion program at Alberni division include installation of two high-speed newsprint machines, general purpose paperboard and coarse paper machines, increasing unbleached kraft production to 500 tons daily.

Capitalization outstanding at Sept. 30, 1955, consisted of $2.1 million 3%-3¾% serial bonds maturing equally in 1958 and 1959; $2,383,000 4% bonds due 1965; 48,009 class A noncallable convertible cumulative npv shares; and 5,237,529 class B npv shares.

Marathon

Marathon Paper Mills of Canada is a subsidiary of **Marathon Corp.**, Menasha, Wis. It operates a high-grade bleached kraft pulp mill at Marathon, Ont., producing 375 tons a day.

Company has cutting rights on three million acres of pulpwood forests in Canada. The pulp is converted to paper at mills at Ashland, Green Bay, Menasha and Rothschild, Wis., Menominee, Mich., and Oswego, N.Y.

Company in November last year purchased Manchester Paper Boxes Ltd., a Toronto firm manufacturing folding and setup paper board boxes, and changed its name to Marathon Packages Ltd.

Net sales of the parent company for the nine months ended July 31, 1956, were $109,174,850, compared with $95,872,446 for the corresponding period of previous fiscal year. Net earnings for the nine-month period were $6,109,945 or $1.69 a share, compared with $6,528,479 or $1.81 a share in the same period a year earlier.

Earnings did not reach anticipated levels because cost of goods produced continued to increase, explained President John Stevens, Jr. Sales price increases have not as yet fully compensated for the cost increases, he said.

Fixed expenses were budgeted in anticipation of a sales volume in excess of that which was attained. Inventories of finished goods increased.

Earlier this year, the parent company completed arrangements for a $95-million financing program to provide funds for normal and long-range expansion. These funds will preclude the necessity of equity financing in the foreseeable future, said Mr. Stevens.

Minas Basin

Minas Basin Pulp & Power Co. is a manufacturer of groundwood pulp as well as producing paper board and carrying out extensive lumbering in Nova Scotia. Company's mill at Hantsport, N.S., has a daily capacity of 110 tons of bleached and 20 tons of unbleached groundwood pulp.

In 1955, shipments of groundwood pulp rose to a record 32,900 tons, up from 1,539 tons in 1954. Most of the pulp is sold to the **Scott Paper Co.** in the U. S.

Capitalization comprises 17,000 authorized common shares, no par value, all of which are issued and outstanding.

North Western

North Western Pulp & Power Co., owned jointly by **North Canadian Oils Ltd.** and **St. Regis Paper Co.**, New York, has cutting rights on 3,000 sq. miles of Alberta timberland, and has been granted an additional 3,000 sq. miles of timberlands as a reserve for future expansion.

Construction of company's pulp mill, the first in Alberta, is under way at Hinton on the eastern slope of the Rocky Mountains. Production is to start early in 1957.

St. Regis Paper will operate and manage the mill and sell its output. Participation in this project greatly enlarges the activities of St. Regis in Canada.

The mill will have a perpetual pulpwood supply through a long-term timber grant from the Province of Alberta held by North Western Pulp and Power Ltd. It will operate on lodgepole pine and white spruce.

The $35-million mill will have an annual capacity of 150,000 tons of bleached kraft pulp. St. Regis will purchase part of the output for use in its own mills and will sell the balance in the open market.

Timber cutting is well under way on the company's timberlands, and a substantial volume of pulpwood is already stored in the yards.

When completed, the mill is expected to employ about 500 people, and another 1,500 workers will be employed in woodlands operations.

For detail on St. Regis Paper Co. (Canada) Ltd., wholly owned subsidiary of St. Regis Paper Co., see separate report in the specialty paper section of this issue.

Ontario Paper

Ontario Paper Co., Thorold, Ont., and its wholly owned subsidiary, Quebec North Shore Paper Co., Baie Comeau, Que., are owned by the Chicago Tribune and the New York News.

Pulp capacity of the two plants is 200 tons daily, which is sold on the open market. Company contracts with Beaver Co. to take the output of its newsprint machine, supplying necessary raw materials, such as pulpwood, sulphite, and steam.

The Thorold mill obtains its wood supplies from the company's timber limits at Shelter Bay and Franquelin, Que.; Heron Bay, Lake Superior; and Manitoulin Island.

Financial and operating sta-

(Continued on page 66)

A highly diversified fleet of aircraft, suitable for the Canadian north, enables Wheeler Airlines to carry out a wide range of assignments in connection with the pulp industries. These aircraft include the Otter, Beaver, Norseman and Cessna on floats, wheels or skis. Also the amphibious twin-engine Canso PBY for transport of heavier supplies or personnel; twin engine Anson V on wheels for aerial photography and transport; four-engine C54, and twin-engine DC3 and C46 for heavy cargo and transport work.

Wheeler Airlines have been prime contractors for the aerial spray projects over New Brunswick and the Gaspé Peninsula for the past four years, and maintain a fleet of seven Stearmen specially equipped for all types of aerial spray work.

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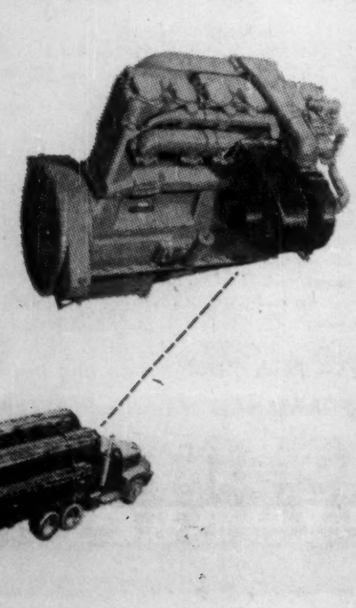

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Manufacturers of Fine Paper Products Report Year of Encouraging Progress

Alliance Paper

Alliance Paper Mills Ltd., a wholly owned subsidiary of **Howard Smith Paper Mills Ltd.**, manufactures bleached and unbleached sulphite pulp and a wide variety of paper products.

It manufactures tag and folder stock, board, manifold, glassine, cellucine, carbonizing, waxing papers, and sulphite specialties, tag, insulating, wrapping, flour sack papers, boxboard and board specialties, coated papers and flour sacks.

A sulphite mill producing bleached and unbleached sulphite is also operated at Merritton, Ont.

A plant at Georgetown, Ont., produces coated stocks, such as book, litho, label, tag, stock, board, flour sack paper, and other specialties. A wholly owned subsidiary, **Don Valley Paper Co.**, manufactures blotti ; covers, bristols and many specialty papers.

A former subsidiary of Alliance, **Lincoln Pulp and Paper Co.** is reported to have been sold.

Individual statistics on annual capacity of the plants are no longer being released. Figures a year ago were: paper mills with three Fourdrinier machines —20,000 tons; one cylinder machine—20,000 tons; sulphite pulp mill 32,000 air dry tons; a coating plant—9,000 tons.

Major project last year was modification of the cylinder board machine at the Lincoln Division to increase its productive capacity. New vertically stacked dryers require construction of a penthouse, which in turn involved major alterations to the machine room. Other equipment such as pulping, screening, calendar and cutting was installed to accommodate increased production and make possible manufacture of grades not before made on that machine.

Financial and operating statistics are consolidated with those of **Howard Smith Paper Mills**, also in the fine paper section.

Eddy Paper

Eddy Paper Co. is an investment and holding company whose wholly owned subsidiary, the **E. B. Eddy Co.**, operates an integrated pulp and paper organization manufacturing and distributing a wide range of paper products.

Eddy Paper has funded debt of $19,625,000 and 200,000 class A $1 cumulative $20 par shares and 200,000 npv common shares outstanding. All the common shares outstanding are owned by **J. R. Booth Ltd.**

Over 82% of the capital stock of **Sidney Roofing and Paper Co.**, including all of the class "B" (voting shares) are owned by Eddy Paper Co. Sidney Roofing owns and operates at Victoria plant said to be the largest west of Toronto for the manufacture of asphalt roofing and allied products. The company's wholly owned subsidiary, **National Paper Box Ltd.**, owns and operates at Vancouver the largest and most modern plant west of Winnipeg for manufacture of folding and rigid paper boxes. **Bishop Asphalt Papers Ltd.**, a subsidiary of the company, manufactures and markets roofing and building materials in Eastern Canada.

Consolidated net profit of Eddy Paper Co. for 1955 was $1,538,917, 16% higher than consolidated net for 1954 of $1,321,652.

E. B. Eddy Co.

E. B. Eddy Co. is an operating subsidiary of Eddy Paper Co. The company sells most of its newspaper output under long-term contracts. Other products are distributed in Canada through the company's own sales organization or in the U. S. and overseas. It produces a wide range of paper products including fine papers, household paper products, paperboard and newsprint.

It owns plants on the Ottawa River at Ottawa, Ont., and Hull, Que., with a combined rate of capacity of 155,000 tons per annum of finished products. It owns three hydro-electric plants at the Ottawa River at Chaudiere Falls which supplies about 60% of the company's power requirements. Balance is supplied by **Gatineau Power Co.**

Company holds timber limits, leases and licenses to more than 5,800 square miles, of which about 4,000 were acquired from **J. R. Booth Ltd.** These provide an estimated potential perpetual yield of 160,000 cords per annum. Timber reserves are conserved through purchase of about 50,000 cords annually of private land woods. Present annual consumption is approximately 200,000 cords.

The bulk of timber resources is located in the Gatineau and Ottawa River watersheds, permitting use of those rivers for driving log to the mills.

Parent company showed consolidated net profit for 1955 of $1,538,917, 16% higher than consolidated net profit for 1954 of $1,321,652. Statement included earnings and assets of **Sidney Roofing and Paper Co.**, a partly owned subsidiary, and its subsidiaries. Company owns over 82% of the capital stock of Sidney Roofing including all class B voting shares.

The company reported excellent progress in 1955 on a two-year capital program to increase capacity for newsprint, paperboard and fine and specialty papers. Total outlays on the program will run about $5.5 million, latest estimates indicate.

It has under active study various alternatives open for major projects leading to further and substantially greater increases in productive capacity.

Capital expenditures amounted to $3,878,298 in 1955 of which $3,192,658 was in the E. B. Eddy Co. and $685,640 in Sidney Roofing and its subsidiaries, and it is estimated that approximately $5.7 million will be spent on capital additions in 1956. The major projects of a two-year period include:

—Modifications of the No. 8 Eddy paper machine and Hull groundwood mill to increase newsprint capacity by about 7,500 tons annually.

—Rehabilitation and modernization of the Eddy No. 12 paperboard machine to raise productivity and improve product quality.

—Rehabilitation of the Eddy No. 1 paper machine to improve product quality and raise capacity by approximately 25%.

—Further developments of the Eddy specialty paper machines in the Ottawa mills to improve flexibility and product quality and add to capacity for production on fine and specialty paper.

—Installation of a new large boiler and ancillary equipment in the Eddy steam plant in the Ottawa Mill, replacing three small obsolete boilers, thereby increasing steam capacity as required by the increased paper machine production indicated above.

—Acquisition of land and substantial progress on construction of the paperboard mill of Sidney Roofing and Paper Co.

Sidney Roofing embarked on major expansion program on the B. C. mainland. The first phase, includes construction of a paperboard mill, with ancillary services, and an administration building is expected to be completed and in operation by mid-

(Continued on page 67)

Reports on Wood Pulp Companies

(Continued from page 65)

tistics are not published as there is no direct public interest in the company. For the main report on Ontario Paper, see the newsprint section.

Quebec P. & P.

discontinued pulp production in 1930 and was placed in bankruptcy in 1942 following a petition from the Quebec Streams Commission on a claim for $1.8 million for arrears for water dues on the Kenogami reservoir dam. All the company's former pulp mills and timber lands were sold to the Quebec Government in August, 1949, for $1.5 million.

In November of the same year it was authorized that preferred shareholders would receive $23 per share on delivery of certificates to the trustee before March 15, 1950. No payments have been made on shares delivered after that date, it is reported.

The bankruptcy estate of the corporation is still to be wound up, with various matters to be settled between the trustee and the Provincial Government before final closing of the estate.

Restigouche

Restigouche Co. is a wholly owned subsidiary of **Fraser Companies Ltd.** and manufactures bleached sulphite pulp for use in paper making and dissolving pulps for manufacture of rayon viscose yarns, Cellophane film and other products.

The company's mill at Atholville, N.B., has a daily capacity of approximately 265 tons of paper making grade or 200 tons of dissolving grade.

Construction of a new steam generating plant at the mill, consisting of two steam generators, was delayed but came into operation in March of this year. A new turbine generator at Atholville was expected to be operating by mid-year and new ventilation systems have been installed on the two drying machines. In 1955 the new pulp wood haul-up was constructed at the mill.

As at Dec. 31, 1955, the parent company and its subsidiary Restigouch owned 1,559 sq. miles of freehold timber lands and 3,972 sq. miles of leasehold timber limits in New Brunswick and the eastern part of the Province of Quebec.

Consolidated net profit of the parent company and subsidiaries in 1955 was $5,710,785 compared with $4,868,171 in the previous year. Consolidated net profit for the first six months of this year were $3,388,077 or $1.52 per common share compared with $2,383,894 or $1.07 per common share in the first half of 1955.

President Aubrey Crabtree reported that the price of unbleached sulphate pulp shipped to the United States was increased by $5 per ton on April 1, 1956, and should apply to approximately 15,000 tons over the balance of the year.

St. George

St. George Pulp and Paper Co. operates a pulp mill at St. George, N.B. The company is one of the oldest groundwood processing plants in Canada. It is one of the few Canadian mills to produce bleached groundwood pulp for sale.

In 1949 the company added a bleaching plant to bleach groundwood by the sodium peroxide process—the first operation of its kind in Canada.

The mill is located at the mouth of the Magaguadavic River and has an annual capacity of 25,000 tons. About 80% of the production is bleached and sold under the trade name of Fibrewhite while the balance is sold in the unbleached form. Export sales account for nearly all of the total shipments.

Company's 1955 operations were somewhat reduced because of low water conditions experienced from June 1 onward. During the period the Eastern part of New Brunswick experienced one of the dryest summers in history.

Since Jan. 6 of this year, company's mill has been operating at full capacity. Officials term Fibrewhite business good and anticipate 1956 will be an exceptionally favorable year.

Company is not intending any expansion for the present. Current production of Fibrewhite bleached mechanical wood pulp is about 24,000 tons annually.

History of the St. George mill dates back to 1902 when it was established by New York interests. In 1932 control was acquired by Edouard LeCroix, St. Georges de Beauce, Que., and Senator Page of Maine. Extensive repairs were made at the time, particularly to the dam and additional equipment was installed. In 1946 the mill was destroyed by fire but was completely rebuilt and enlarged with production capacity increased about 20%. In 1947 Antoine LaCroix of St. John secured Senator Page's interests.

The company does not issue financial figures for publication.

St. Lawrence Corp.

St. Lawrence Corp. produces unbleached sulphite, kraft and groundwood pulps as well as its newsprint, kraft fibre and specialty papers operation.

Sales of surplus pulps in 1955 amounted to 18,758 tons unbleached sulphite; 15 tons of groundwood; 4,271 tons of unbleached kraft compared with 14,025 tons unbleached sulphite, no groundwood, 2,252 tons unbleached kraft in 1954. Its groundwood mill at Nipigon of 18,000 tons was recently reported idle. The Dolbeau, Que., mill consists of a groundwood pulp mill, an unbleached sulphite pulp mill, a sulphite pulp Kamyr machine and a Flakt dryer. At Trois Rivieres, Que., the mill presently consists of a groundwood pulp mill, and unbleached sulphite pulp mill. At East Angus, operation consists of a groundwood pulp mill and unbleached kraft pulp mill, a semichemical pulp mill.

Full capacity sale of finished products was indicated in the annual report and company's diminished surplus of unbleached sulphite pulps seems likely to find a ready market. The groundwood mill at Nipigon, Ont., out of operation since the latter part of 1953, seems likely to remain inactive due to lack of profitable demand for ground pulpwood.

Company called for redemption on June 15, 1956, $979,000 principal amount of its 5% first mortgage sinking fund bonds, series A, due 1972 at par, payable in Canadian funds, and $356,000 principal amount of its 4¾% first mortgage sinking fund bonds, series B, due 1972 at par, payable in U. S. funds.

Shareholders of the company in May approved a creation of 500,000 preferred shares, $100 par of which 150,000 shares, designated at 5% cumulative redeemable preferred shares, series A, were offered at $99 per share to yield 5.05.

Thurso P. & P.

Thurso Pulp & Paper Co., is building a 200-ton kraft pulp mill at Thurso, Que., about 95 miles northwest of Montreal near the Ottawa River.

The mill, which is expected to cost in the vicinity of $17 million, is 70% owned by **Singer Manufacturing Co.**, a sewing machine manufacturer, and 30% owned by **Perkins Goodwin Co.**, New York, pulp and paper distributors since 1846.

When completed, the project will comprise a power house, bleach plant, pulp dryer, storage room and be equipped with office as well as laboratory facilities. Detailed engineering and construction is being carried out by **Foundation Co. of Canada.** The plant is scheduled for completion in January of 1958.

Cutting rights on some 490,000 acres of woodland in the Thurso area, controlled by Singer, are considered sufficient to sustain the mill in perpetuity. The mill will also use sawmill waste and salvage from the Singer operation. Some freehold timber may also be purchased.

Pulpwood will be transported to the mill by the **Thurso and Nation Valley Railway**, a wholly owned subsidiary of Singer Manufacturing. About 60% of bleached hardwood and 40% bleached softwood will be used in production. The mill will employ approximately 250 persons.

Perkins Goodwin, an international pulp and paper marketing and management organization, will handle both domestic and export sales.

President of Thurso Pulp & Paper Co., is P. B. Bourget, manager of the Singer Manufacturing Company (Thurso Works) and president of the **Thurso and Nation Valley Railway Co.**

All directors are representatives of either Singer or Perkins Goodwin.

Consulting engineer in charge of design and construction of the over-all project is E. A. Charlton, Montreal.

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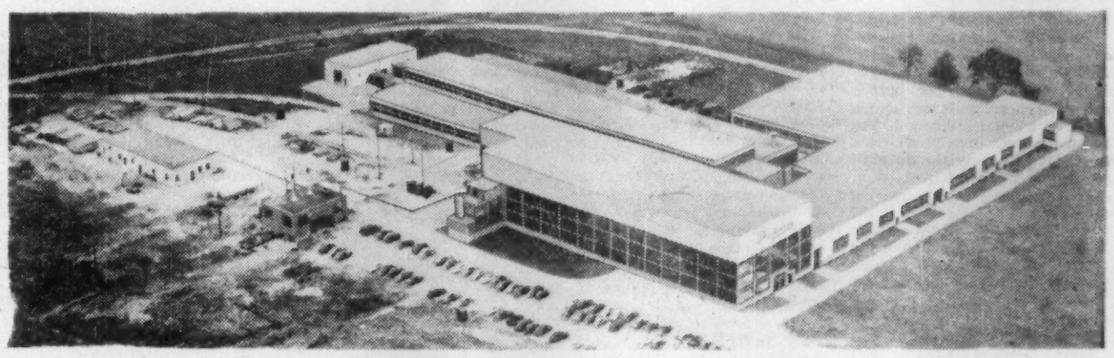

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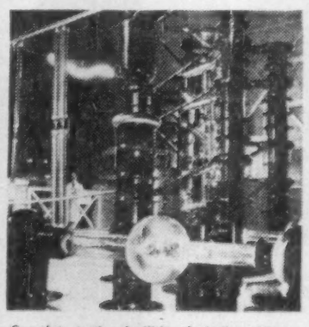

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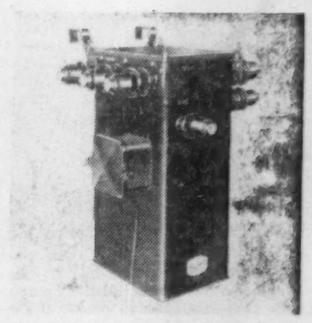

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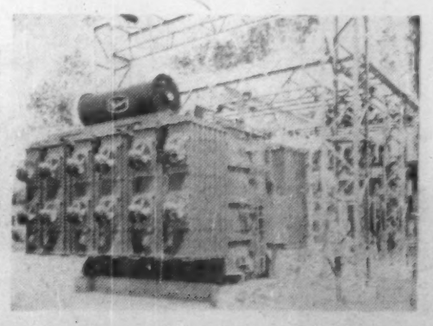

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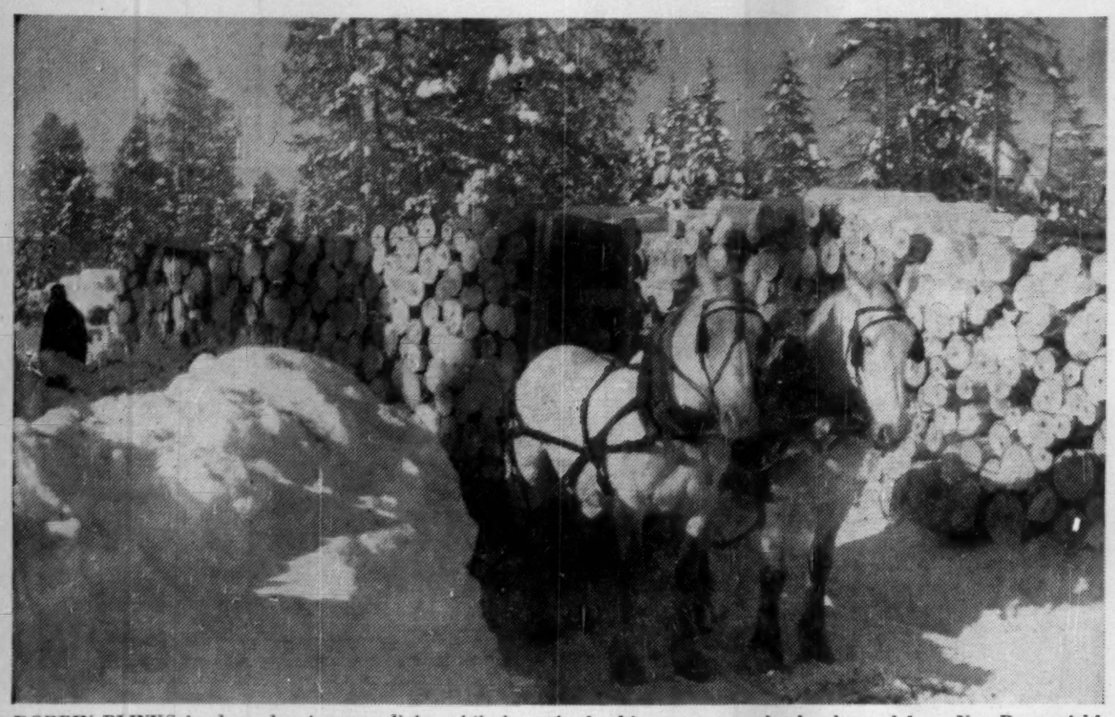

DOBBIN BLINKS in the pale winter sunlight, while he waits for his master to unload pulpwood from New Brunswick's Green River forests.

Reports on Fine Paper Firms

(Continued from page 66)

1957, at a cost of about $5 million. Plans for subsequent expansion of this program are now under consideration.

Capitalization at June 30, 1956, consists of $14,625,000 funded debt and 3,000 common shares $100 par. All the common is held by the Eddy Paper Co.

President and Managing Director R. A. Irwin said in the annual report the company is in a strong position to participate fully in the continuing dynamic growth of the nation and in the industries of which it is a part. It moves forward from a base of modern efficient plants and sound finance. The sales organization and policy aided by effective advertising product research, are geared for expansion. They are confident the coming years will see new highs established in all phases of activity, he said.

Fraser Cos.

The wholly owned subsidiary of **Fraser Cos., Fraser Paper Ltd.**, operates paper mills at Madawaska, Maine, producing chemical and groundwood pulp specialty papers sold chiefly in the U. S. market.

The daily capacity of these mills is about 515 tons consisting of 350 tons of chemical pulp papers and 165 tons of groundwood papers.

For 1955, Fraser Cos., reported consolidated net profit of $5,710,785 compared with $4,868,171 for the preceding year. In the first six months of this year consolidated net profit totaled $3,383,077 against $2,383,894 for the first six months of last year.

Demand for various grades of pulp, paper, and paperboard manufactured during the first six months of this year was sufficient to permit all mills to operate at capacity.

Consolidated net working capital at December 31, 1955, increased to $15,183,385 from $13,913,737 at the end of 1954. Inventories were slightly lower at $11,216,136 compared with $11,811,101.

Capital expenditures in 1955 amounted to $4,174,830 for new additions and improvements to plant and properties.

Howard Smith

Howard Smith Paper Mills Ltd., with its subsidiaries, is the largest producer of fine and specialty papers in Canada. It makes over 500 grades of paper which are sold throughout the Dominion, and exported to the U.K., South Africa, New Zealand, Australia, South America, and other countries.

Pulp and byproducts produced comprise bleached sulphite, bleached soda, and groundwood pulp; vanillin, a flavoring material; tomlinite, a synthetic resin.

Through its subsidiaries, company also controls plants for the manufacture of groundwood pulp, bleached and unbleached kraft pulp and sulphite pulp, glassine, greaseproof, wrapping, toilet and coating papers, tags, paper bags, and specialties, paper and cloth base-plastic laminates, newsprint and rotogravure paper.

Combined annual capacity for sale (including **Donnacona**) is 310,000 tons of fine paper, kraft, specialties, newsprint, etc.; 45,000 tons of bleached soda pulp, 19,000 tons bleached and unbleached kraft pulp, 8,000 tons bleached and unbleached groundwood, 100,000 lb. vanillin, 3,000 tons of decorative and industrial laminates, 100 million sq. ft. of building board, 350 million paper bags and 12 million flour sacks.

Total production of all kinds of pulp was 412,982 tons against 364,711 tons the previous year; total production of paper was 282,138 tons against 260,080 tons the previous year.

Company owns plants at Cornwall, Ont., Beauharnois and Crabtree Mills, Que. These plants are owned directly by Howard Smith Paper Mills Ltd.; those of the Windsor Mills Division are owned through **Canada Paper Co.**, those of the Merritton, Georgetown and Toronto (**Don Valley Paper Co.**) divisions are owned through **Alliance Paper Mills Ltd.**, and the Ville la Salle, Montreal plant, is owned through the **Arborite Co.** The plants of **Donnacona Paper Co.** are at Donnacona, Que.

Consolidated net profit last year increased to $6,146,659 against $5,020,256 in 1954.

Demand for most of company's products was strong throughout the year with almost all units operating at full capacity or very close to it. At the annual meeting in April it was stated that present indications point to a continued strong demand for at least the next few months. During the first quarter of the current fiscal year, earnings were a little better than those for the comparable period in 1955.

Dominion Tar and Chemical Co. Ltd. this year acquired approximately 30% of the outstanding common shares of the company, it was announced in July 1956. Of that total, a 16% interest (285,000 shares) was purchased from E. Howard Smith, president and chairman, and H. Roy Crabtree, director. It was stated that the sale did not imply any lack of confidence in the company but rather the reasons for disposing of the shares were of a purely personal financial nature.

Total capital expenditures last year were $7,381,352 and funds set aside for future expenditures in other corporate purposes at year end were $4,155,531 ($5,152,531 in 1954).

Combined total sales of all companies for 1955 reached $89,163,056, up almost 11% over 1954.

Capital projects completed during the year or under way included:

Cornwall division — extension to finishing room, new bleach plant for alkali pulp, additional dryers for No. 1 paper machine.

Canada Paper — extension of the St. Francis finishing room, new barking drum, bark burning equipment.

Donnacona—speed-up of No. 3 paper machine.

Alliance—additional dryers for No. 2 paper machine.

Arborite—new treater, new hydraulic press, building extensions.

Provincial Paper

Provincial Paper Ltd., wholly owned subsidiary of **Abitibi Power & Paper Co.**, manufactures and distributes high grade book litho, bond, coated and writing papers. It has four plants, with a productive capacity of abou' 106,000 tons per year.

The plant at Georgetown, Ont., is a paper coating mill. The Thorold, Ont., plant has four paper machines with a daily capacity of 135 tons. The Mille Roches mill is to be flooded after the St. Lawrence Seaway project has been completed, and one of its two machines has already been moved out. Two paper machines with a daily capacity of 95 tons are at the Port Arthur plant; the sulphite mill has a daily capacity of 60 tons and the groundwood plant a total capacity of 100 tons daily. Company also owns and operates a hydro-electric plant at Thorold, generating about 850 hp.

Preliminary discussions have taken place with the Hydro-Electric Power Commission of Ontario about expropriation of the Mille Roches plant. Municipal Board of Ontario will decide compensation. However, it is still too soon to know when this long outstanding transaction will be settled, company says.

The new fine paper machine at Thorold is in full production.

Company has completed its five-year expansion program which tripled Thorold mill's annual capacity to approximately 50,000 tons of fine paper. Mill is expected to operate at capacity in foreseeable future due to strong demand for fine papers.

Demand for fine paper products was reasonably strong in 1955 and there was a distinct improvement in the last two months. Total production of fine papers and printing papers was 85,972 tons, compared to 74,593 tons in previous year.

Rolland Paper

Rolland Paper Co. manufactures and sells high-grade bond, writing, ledger, air mail, offset and mimeograph papers. Sales offices are located in Toronto, Winnipeg and Vancouver.

Company's plants are located Mont Rolland and St. Jerome, Que., production of the Mont-Rolland Mill, is about 16,000 tons of sulphite bond and bookpapers. The St. Jerome Mill production is about 20,000 tons of high-grade rag stock and sulphite bond papers.

The two mills have a combined floor area of approximately 450,000 sq. ft. and combined plant sites comprise about 377 acres.

Company is currently undertaking a $4,650,000 expansion and improvement program at its St. Jerome Mill which calls for installation of a new paper making machine with an annual capacity of 18,000 tons, enlarged water filtration plant and construction of additional buildings. The new capacit, will enable company to alternately close down existing machines for overhaul and modification without interfering with production.

The new paper machine will increase ultimate capacity of saleable products by over 54%. Company expects that the new machine will be in operation during the third quarter of 1957.

To finance the expansion, in January of this year company issued and sold privately $1,500,000 in 3¾% first mortgage bonds, series A and offered publicly $4,000,000 in 4½% first mortgage sinking fund bonds series A. Part of the proceeds will be used to redeem the $1,225,000 first mortgage bonds outstanding at the time of the new issue.

Prior to the new issue, company split its then authorized 100,000 common shares on a three for one basis, two of the new shares being designated as class A the other as class B.

Class A shares are entitled to a noncumulative cash dividend at the rate of 80c per year and share equally with class B stock in any further distribution after class B shares have received 40c per share.

Throughout 1955 all of company's machines ran at full capacity. More than 97% of the tonnage was shipped to the Canadian market.

Sales of company's products increased 8% over 1954 and resulted in a net operating income of $1,533,265 compared with $1,610,179 in the previous year. Net profit was $588,579 compared with $568,429 in 1954. Working capital at the year end was $2,501,652 ($2,466,456).

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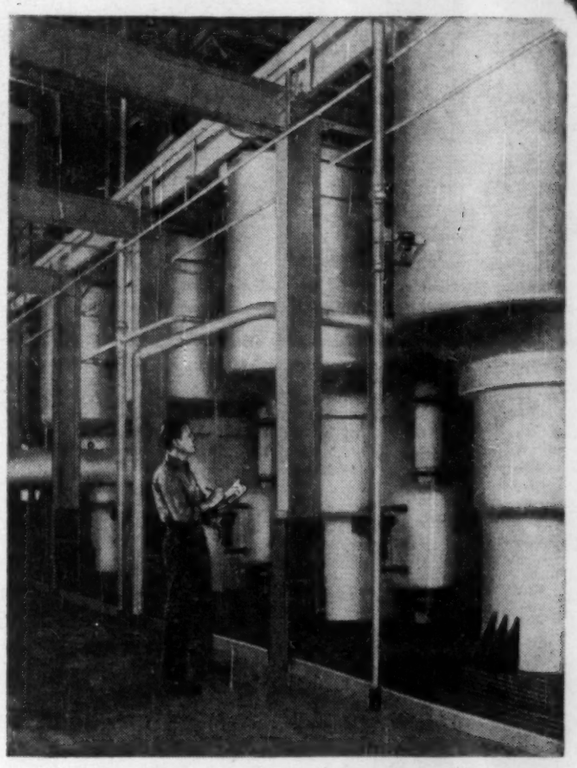

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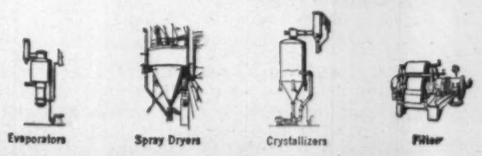

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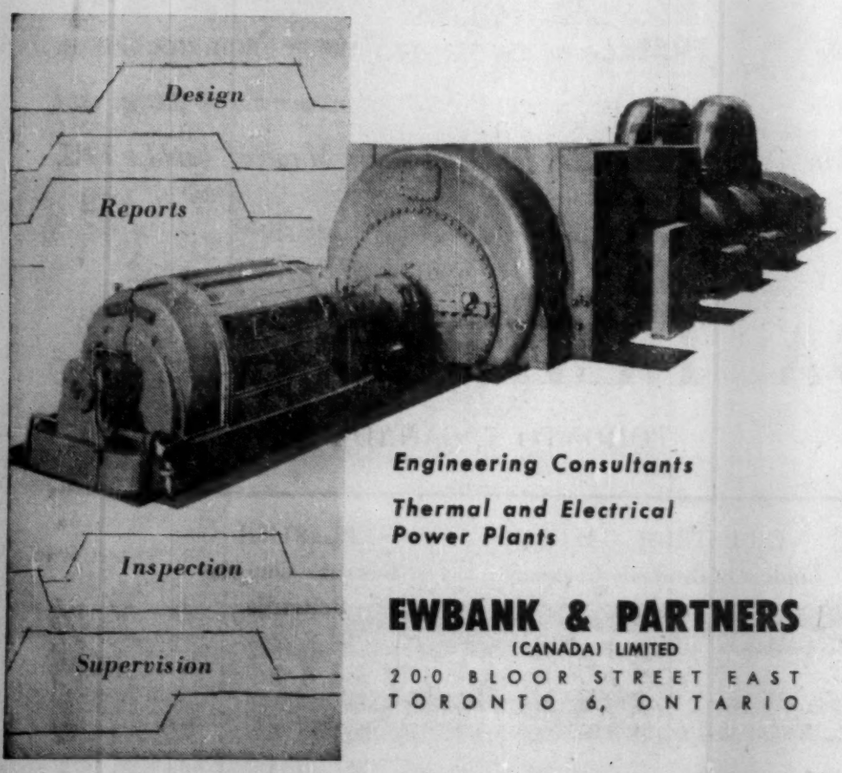

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Pulp and Paper: A Special Report

Making Money on the Pulp, Paper Stocks?

Although the majority of pulp and paper companies are operating at capacity levels, with outlook excellent for continued high demand into the next year at least, there has been comparatively little buying interest in this stock group over the last few weeks.

There is no doubt that the oft-repeated warning of approaching overproduction has had a chilling effect on potential stock buyers.

Today many investors argue this way: These stocks have had their boom—actually have outdistanced every other stock group in the postwar years. Now tremendously expanded plant capacity—with a second construction wave now under way—is bringing the bogey of overproduction closer every month.

There are much more dynamic growth potentialities today in several other stock groups which so far haven't participated in the postwar boom to the same extent as the pulp and paper group.

On a price-times-earnings basis — the pulp and paper stocks appear one of the most underpriced groups on the board today, these investors will admit. But once public interest swings out of a long-popular stock group that has accomplished a remarkable rise, it takes quite a while to attract it back again, they add.

But others with a close eye on the market maintain that issues like **Abitibi** and **St. Lawrence**, whose market prices just represent nine and 10 times respective share earnings, are bargains hard to match anywhere else on the Canadian industrial market. Both companies have shown smart first half profit gains and, like majority of other companies in this group, have managed to work themselves into a strongly diversified, well-financed organization.

In view of the indicated continued high market demand for newsprint, fine paper and, to a lesser extent, kraft and paperboard, earnings should hold at high levels well into 1957. Dividend yields would appear well protected even beyond that period.

An intermediate unsettling factor in the outlook is the current premium on Canadian funds (over U.S.). At present rates of exchange this is reducing sales revenue per ton of newsprint sold into U.S. anywhere from $2.25 to $2.62.

The dire overproduction forecasts voiced recently by J. D. Zellerbach, president of the big West Coast pulp and paper organization, were carefully absorbed by investors here.

Mr. Zellerbach predicted that kraft pulp and board are likely to be in overproduction next year and newsprint in two years. He also stated that this would produce a disrupting price war unless the industry was "wise about it." Expansion plans, he pointed out, if not already implemented, could be quickly shelved if a general reappraisal of the situation called for this.

While agreeing with Mr. Zellerbach that supply and demand were coming well within sight, very few pulp and paper producers expect the situation to become so unsettled to bring about price wars—at least over the next couple of years.

One top newsprint authority commented that a lot hinged on what newsprint exports to soft currency countries would be in 1958. These markets are likely to open up, he predicted.

Other officials claim most industry equipment is today operating at greater than optimum speeds anyway. Overproduction could be largely offset by a reduction in speed, which they claim wouldn't do "much harm."

Certainly newsprint stocks in U.S. consumers hands have been expanding. As of end of July these inventories were up 23.9% over same period last year. This represents some 44 days' supply (it was 36 days' supply last year at same time). Inventory build-up, however, often slows down from now until end of the year because of the heavy last half business and advertising tempo.

Here are a few industry statistics that help to put the picture in focus:

- Canadian newsprint production was up 5.1% at end of July at 3,728,617 tons; shipments to all markets were up 3.7%.
- Total pulp exports for first seven months were up 21,000 tons at 1,368,000 — a gain of 1.6%.
- Fine-paper production was up 15.9% during the first seven months. This included a 21.5% increase in export shipments.

Since export markets account for close to 80% of the industry's sales in both tonnage and value, outlook is governed largely by forward trade prospects. There is no doubt that expanding pulp and paper production in U.S. will tend to narrow the domestic industry's export potential somewhat in months ahead. Against this, however, must be balanced the still rising U.S. consumption trend and the strong likelihood of stepped-up exports to soft currency countries.

While Canadian newsprint production just increased 5.1% in first seven months of the year U.S. output jumped 13%. Carrying this comparison further U.S. shipments to its own domestic market increased 19.5% in this period while Canadian shipments to U.S. were up just 3.4%.

Perhaps of longer-term significance in the outlook for this branch of Canadian industry is the rise in consumption of newsprint in many undeveloped countries. Improved education standards could lead to a tremendous increase in demand for newsprint in many Asiatic countries. With the Canadian producer still one of the most efficient in the world, he should have a good chance of getting some of this market.

Operating costs continue upward. As they rise, management is redoubling research and supervision efforts to help keep themselves in the competitive market picture. One trend in this direction is the big swing to up-grading of products, particularly among integrated lumber-pulp and paper producers. Former waste products such as sawdust and chips are now being processed into hardboard and certain paper grades.

While newsprint is the big dollar earner, Canadian plants market a broad range of other papers as well as pulps. Canada consumes domestically around 90% of her pulp and about the same percentage of her kraft, wrapping papers and board production. Thus firms concentrating in these products are less vulnerable to the fluctuating demands and prices in export markets.

In an accompanying table eight pulp and paper companies which have issued interim financial reports are reviewed. In only two cases have earnings for the first half of 1956 dropped below the corresponding period of last year and in both these cases the decline was less than 3%. St. Lawrence Corp. showed a whopping big gain of 55% over the 1955 first half; Abitibi, 22.7%.

Perhaps of more significance is the relation of market prices to companies' indicated 1956 earnings. They range all the way from Abitibi's nine times to Powell River's 21.6 times earnings. The average, however, is only 11.7 times. This is well within the average for stocks of a broad range of industries represented in the Canadian market.

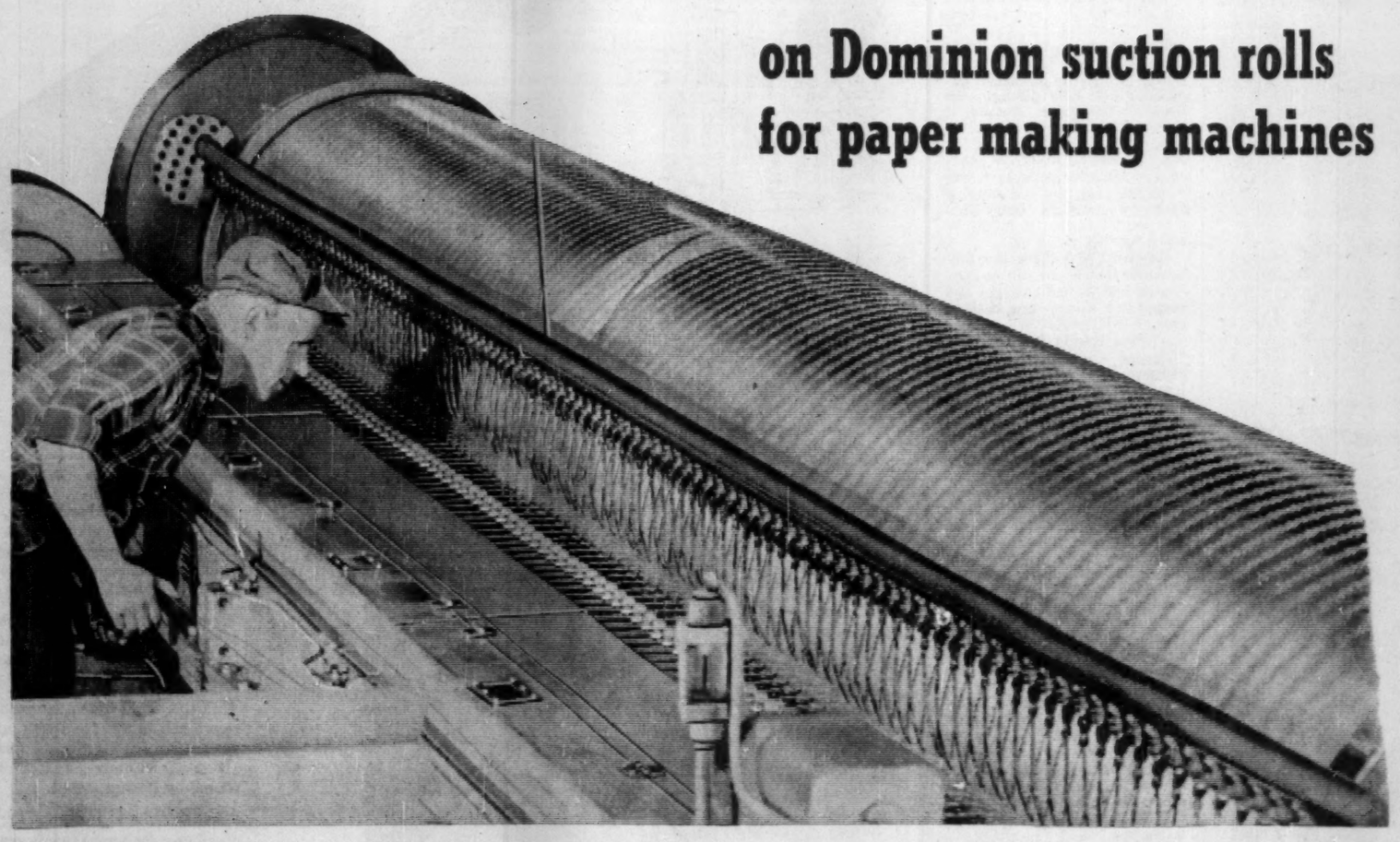
So Far This Year, Most Firms Ahead in the Profit Stakes

	Net Profit for all 1955 $	Net Profit 1st half 1955 $	Net Profit 1st half 1956 $	1st half net 1956 to all 1955 %	Change in net 1st half '56 from '55 %	Earnings per Share — All 1955 $	Earnings per Share — 1st half 1955 $	Earnings per Share — 1st half 1956 $	Recent Price per Share $	Recent Price Times Earnings — All 1955	Recent Price Times Earnings — **Prospective 1956
Abitibi	13,936,026	6,508,342	7,990,684	57.3	+22.7	3.20	1.49	1.85	36½	11.4	9.0
Bathurst	3,154,819	1,413,587	1,534,315	48.6	+8.5	4.78*	1.89	2.26	43	9.0	9.5
Consol. Paper	13,747,019	6,798,352	7,852,962	57.1	+15.5	2.68	1.32	1.53	38½	14.4	12.6
Donohue Bros.	872,373	431,543	498,169	57.1	+15.4	2.91	1.44	1.66	33	11.3	9.9
Fraser Cos.	5,710,785	2,383,894	3,388,077	59.3	+42.1	2.57	1.07	1.52	40	15.5	13.1
Great Lakes	3,450,118	1,634,426	1,607,118	46.6	—1.6	2.78	1.31	1.29	43½	15.6	16.8
Powell River	12,197,018	5,852,378	5,735,707	43.0	—2.0	2.90	1.38	1.37	59¼	20.4	21.6
St. Lawrence	7,062,842	2,636,338	4,084,840	57.0	+55.0	6.40	2.39	3.64	74	11.5	10.1

*Class B stock.
**Prospective 1956 earnings are based on doubling of first half results. Half year results do not necessarily indicate full year trend.

350,000 holes correct to 1½ thousandths of an inch...

on Dominion suction rolls for paper making machines



While this represents a remarkably high level in quality production, it is a relatively commonplace occurrence at Dominion Engineering Works. The rolls are drilled to these fine limits to ensure that the applied suction is distributed uniformly across the face of the roll even at high speeds. The pattern of the holes too, must be uniform to provide a constant cross section of the roll shell to maintain beam strength.

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Competition In the South

The peaceful, undulating countryside of the southern United States with its small farms presents a deceptive scene today.

For the centuries-old tranquility has been radically changed by a revolution through large scale development of southern pine for newsprint production and for kraft pulps for other paper and paper products.

Beyond the borders of the South, newsprint manufacturers in Canada and other parts of the world are eyeing the new mills springing up, measuring new capacity against markets, pondering the effect on future pulp and newsprint production.

In the next three years, plans indicate southern newsprint capacity will increase from some 400,000 tons annually in 1955 to approximately 1 million or 1.1 million tons, the latter a 175% increase.

This will mean substantial competition for Canadian shipments in this area. In fact, it will mean producers in this country will have to shop around for other markets.

Southern mills have a substantial advantage in wood and freight costs in supplying nearby publishers compared with Canadian mills. And, to Canadians—what is more important—all southern capacity in sight is planned for use in southern and border states as far as is known.

Future Wood Supply

One of the possibly limiting factors in future developments using southern pine is the supply of pulpwood. Southern mills today are consuming wood at an annual rate of 21 million cords, equal to the total U. S. consumption of such wood in 1947. This is for requirements of its pulp, paper and board industry.

Despite its large and rapid growth, southern pulp and paper industry has been successful in procuring the necessary amounts of wood without much difficulty. What about the future?

Stanford Research Institute estimated some time ago that production of pulpwood in the South would reach 21.1 million cords in 1960, 24.1 million in 1965, and 26.8 million by 1970.

Since mills are already using wood at an annual rate of 21 million cords and existing plans for expansion of pulping capacity indicate a possible requirement of about 26 million cords by 1960, it looks like the industry is going to have to press to increase its forest productivity.

While there is still apparently an adequate supply of southern pine, the large areas necessary to support a modern pulp or paper mill in perpetuity are now less easy to find and with rising demand for wood the cost is rising.

As the expected expansion of the U. S. population and economy proceeds, demand for products other than newsprint also will rise and these competitive factors can be expected to bear with special weight on the southern wood supply.

Paperboard And Kraft

Briefly, the southern newsprint industry will continue to expand over the longer term but not without competition from other pulp and paper products. It is estimated that southern mills produced about 11.5 million tons of paper and paperboard in 1955, 38.5% of the U. S. total of 29,897,000 tons.

On the assumption southern newsprint production approximated capacity, newsprint represented about 3.5% of the South's total output of paper and paperboard in 1955. Paperboard, principally containerboard, and kraft paper account for most of the balance.

The announced plans to increase southern pulp production in the next few years chiefly reflect projected increase in paper and paperboard capacity although there will be some increases in dissolving pulp and market paper pulp capacity. The present rated daily capacity of wood pulp for all southern mills is about 35,000 tons with plans indicating a capacity of 44,000 tons by the end of 1958.

So it is apparent that newsprint isn't going to sweep the field from other pulp and paper products. Southern pine is a valuable species for pulp and paper making—in some respects more valuable for other products than for newsprint. Its long, strong fibres make it particularly adaptable for kraft pulps used in paperboard and packaging materials, and this is already evident by the growth in the South of this type of production.

But there is no doubt the southern pine is the basis of a substantial and growing newsprint industry in the South. The 1955 rated capacity of 400,000 tons represented 28.4% of U. S. capacity of 1,409,000 tons, 5.4% of the Canada-U. S. total of 7,473,489 tons.

In 1956, estimated capacity in the South will increase to 538,000 tons or 33% of the 1,625,000 tons for the U. S. and 6.8% of the Canada-U. S. total of 7,867,514 tons.

There were many technical problems to be solved in using southern pine to make a satisfactory pulp for newsprint. These mainly concerned the large amount of pitch found in this wood. In developing the techniques for using this pulp, many factors had to be considered: methods of cutting and storing the wood and how to grind and treat the pulp to minimize the effect of the pitch.

But the incentive to attack and overcome the technological problems was that it was potentially profitable. Faster growing southern pine is less expensive to grow and produce than northern pine in respect to the southern markets that it serves.

The quality of southern newsprint has been greatly improved in recent years and undoubtedly will be improved further in the future. There is a large forest area and good growing conditions. The annual growth of pine is probably three times compared with Canadian growth rates.

One major Canadian producer of newsprint, **Canadian International Paper Co.**, a subsidiary of **International Paper Co.**, which is one of the major companies active in expansion in the south, has estimated that wood for newsprint costs about 60% less than in a typical eastern Canadian mill. In addition, steam generated power in the South is about the same cost as the present hydro-electric rates in Quebec, thanks to the availability of natural gas.

Economic Advantage

When all the facts and figures are totted up, it is estimated direct manufacturing costs of newsprint are about 20% lower than in Canada. It could mean future large-scale newsprint expansion will take place in the South rather than Canada if timber can be obtained.

At the annual meeting in April of **Powell River Co.**, Vancouver, B.C., for example, it was disclosed that the company is "actively studying" entry into the South because it might be advantageous to do so.

"In the South there are timberlands which can still be purchased and owned outright and cropped on a long-term basis to ensure continuity of supply," Chairman Harold S. Foley said. "Logging costs are favorable; capital costs are substantially lower than British Columbia and because of proximity to markets, freight costs are about half ours."

Before the Gordon Commission this year, President Vernon E. Johnson of CIP said economic prospects make it clear there was sound reason for concern over the threat from the South.

It seems likely to expect that the South will absorb much of the local market and be in a position to supply more efficiently than any other producer. It can also be expected that it will develop export markets that can be efficiently served from this area.

A major advantage of southern pine is that the tree is ready for pulping in 20 to 25 years compared with 70 to 80 years required for northern spruce, such as in Canada. This provides a cost advantage against northern mills although not a qualitative one.

But the speed growth advantage in the South is perhaps slighter than usually supposed. Once a log reaches a mill it makes no difference if it has taken 30 years or 90 years to grow. In fact, the longer growth may give it a higher and better cellulose content.

The South, however, requires only a third the forest area needed in Canada to support a mill. This smaller area provides advantages in fire protection, silviculture, and ease of handling.

In 1954, **Bowater Paper Corp.** became the first established producer to step into the southern U. S. newsprint scene. The company decided that the South more than any other locality of the U. S. provided the necessary markets, natural resources, power and labor force for such a development.

It was aware that in Tennessee, where it built its first mill, there had been a rapid economic growth over the previous decade or more. For example, it found the number of factories in Tennessee had increased from 2,225 to 4,700 in a 12-year period; total income for manufacture was more than twice that of agriculture, which only 25 years earlier had predominated the economy; between 1940 and 1950, the town and city population had increased three times faster than that of rural areas. In a five-year period, the more than 400 newspapers added 1.5 million readers to their circulation; southern citizens bought two-thirds as many newspapers per head as other Americans.

For the newsprint and kraft pulp mill which the giant British organization had in mind it wanted:

—Abundant, permanent, and readily accessible sources of supply of suitable wood;

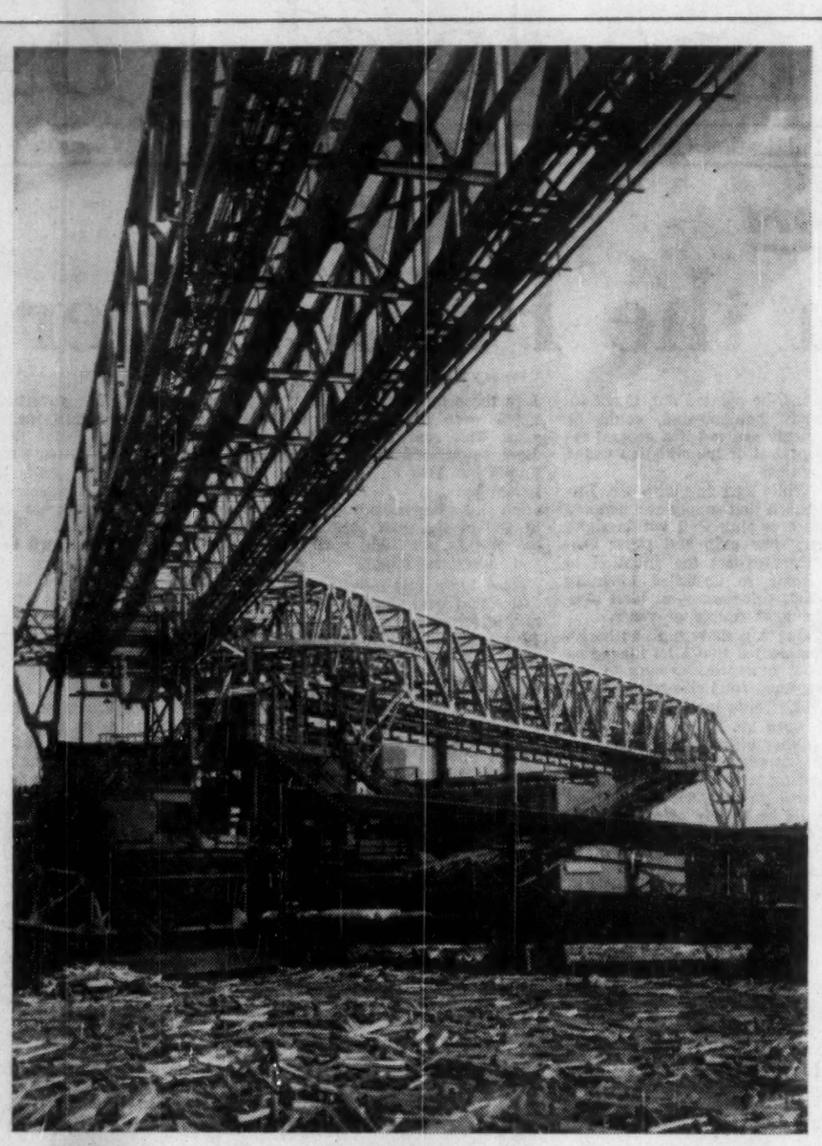
—A cheap and abundant and constant supply of electrical energy, coal or alternatively natural gas, of which large quantities are required for drying both pulp and paper;

—And an assured supply of water of which a great volume is used in the manufacturing process.

After exhaustive studies, it selected a site at Calhoun, in the eastern part of Tennessee, where its requirements were met. There were roads, railways and inland waterways, a good labor force.

Through the Tennessee Valley Authority, a constant supply of hydro-electrical requirements was assured at favorable rates. The site was near an important coal field, a few hundred yards from a natural gas line, close to

(Continued on page 71)



SOUTHERN PINE deteriorates rapidly when stored in the open air. Bowater's new Tennessee mill avoided the problem by building a huge storage pond, above. This pond holds more than 30,000 cords of wood, which is removed for use by grapples.

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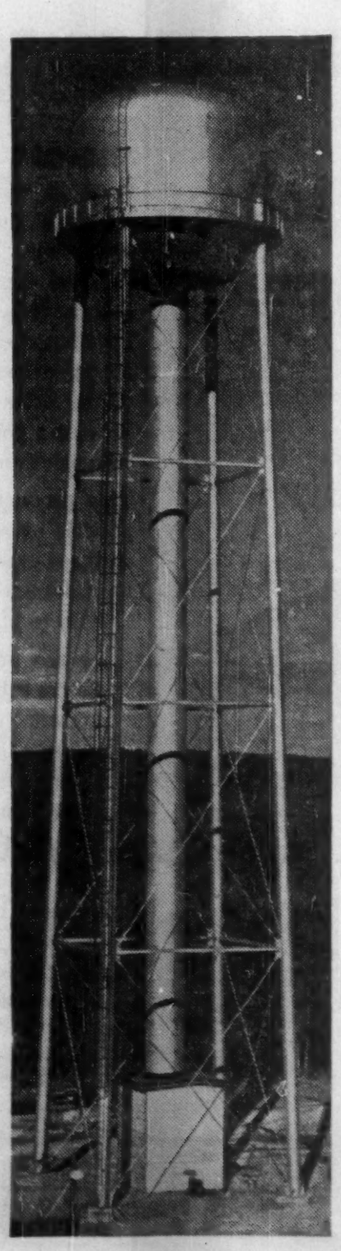

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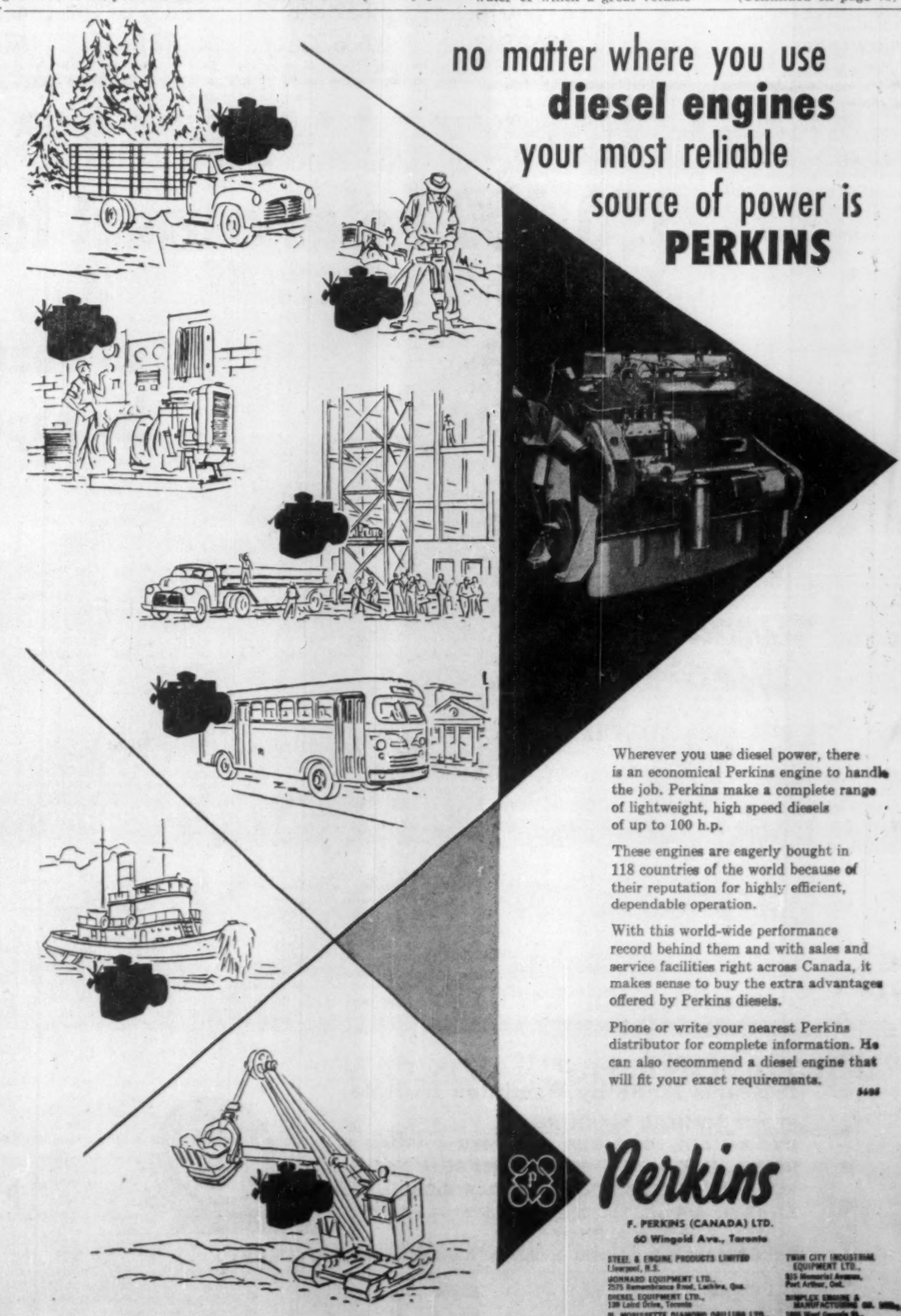

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Labor Peace Seems Certain

Prospects for a protracted labor peace appear to be assured for Canada's booming pulp and paper industry.

In the East Coast area — defined in the industry's dictionary as extending from the Rocky Mountains east to Newfoundland — most operators have by now concluded two-year agreements with the unions, which will see them through until May of 1958.

On the West Coast, mills are now in the second year of a two-year contract and new negotiations likely will get underway this winter or early spring. No major disputes, however, appear to be in the offing there.

The only notes of discord in this otherwise serene picture are sounding in Quebec, and come from within the ranks of labor itself.

There the International Brotherhood of Pulp Sulphite and Papermill Workers and the Canadian and Catholic Confederation of Labor are conducting periodic skirmishes in the battle over which union will represent workers at some mills. In this fight, the CCCL in recent years has been a consistent loser, in terms of mills, membership and prestige.

Recent losses by the CCCL to the International Union include Shawinigan and possibly La Tuque. Hanging in the balance is Grand'Mere where the national union claims to have the support of workers while the CCCL is at this writing still certified as bargaining agent.

Rear-Guard Action

The latter union is currently fighting a rear-guard court action in hopes of staving off decertification, but in the past court action has usually proved unsuccessful and in the long run, has had little but nuisance value.

From a point of view of prestige, the CCCL has been suffering big losses. While this union has been asking for more money than its rival, it has not been getting any such concessions from the operators.

The plain fact is that the International Union sets the pattern for settlement and the CCCL has been able to get as much in its contracts but no more. Because of its dwindling strength, this union appears to be in no position to call the industry tune in contract agreements.

Some pulp and paper industry officials are frankly at a loss to explain why the CCCL keeps on trying to do just this.

Result of this jockeying for position is that some mills which the CCCL represents are just now reaching agreements on last year's contract. These are being reached as part of a process of negotiations over new two-year contracts running into 1958.

While the International Union and the CCCL are battling over membership, there's a certain measure of solidarity on one front at least.

Neither union — nor for that matter most of the central labor organizations in Quebec — like the way in which litigation in civil courts over labor relations cases often delay for long periods the final disposition and settlement of these matters.

Joint Committee

The province's three central labor organizations recently established a joint committee to investigate and make recommendations as to what can be done to achieve more speedy settlement in such cases.

In particular, the committee will take a look at the writ of prohibition and its application in labor relations cases.

What irks the unions is not so much the writ itself but rather the ex parte adjudication of it. This writ, they say, can and sometimes is issued without either the unions or the labor relations board having an opportunity to present respective arguments for or against it.

Much like an injunction, the result of the writ is to stay proceedings in the case to which it applies until the higher court has had an opportunity to examine the matter at hand.

With the overloaded court dockets these days, it sometimes takes a year for the case to be heard, the unions claim. This delay they say works in favor of the employers.

While the unions claim that the "delay through court proceedings" technique is being used by some employers, labor itself is, however, also using the same technique in some of its interunion battles.

Wage Patterns

The new pulp and paper industry wage pattern for Eastern Canada, as established earlier this year, raised base rates by 12c an hour to a new high of $1.65. A further 5% increase, which comes into effect in the second year of the contracts will raise the base rate to $1.73.

Another provision now included in most contracts is up to one week's sick leave with pay.

In the field of medical benefits, most companies are paying the employee's share of such plans — but not the additional cost of coverage for the employee's family where such coverage exists.

The West Coast base rate—traditionally higher than its eastern counterpart—is currently $1.72. That pattern covers mills in both British Columbia and in the Pacific Coast area of the U. S.

Curiously enough, the West Coast rate for skilled labor is currently one cent lower than in the East. Under the new contracts covering the East Coast skilled laborers got an increase of 15c bringing the rate to $2.28, next year in the second year of the contract this class of workers will get a further 11c, bringing the rate to $2.39.

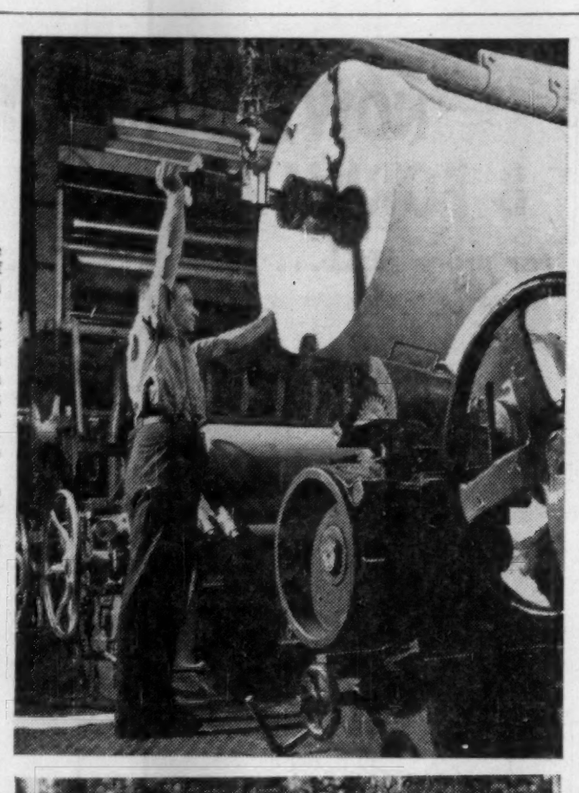
The West Coast skilled rate is currently $2.27, accordingly an increase in the skilled rates on the West Coast likely will be one of the union's demands when negotiations open up next year.

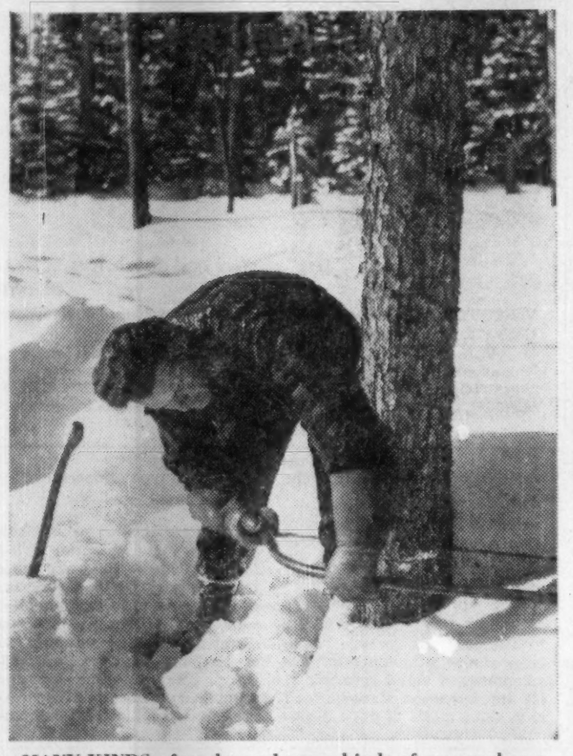
One of the reasons for the generally higher West Coast rates is that mills in that area are on a seven-day operation against six-day operations in the east. Then too, as one pulp and paper industry official put it, everything is bigger on the West Coast—the trees, the mills and the money.

Major Point

In the East, the unions so far have successfully resisted attempts by operators to establish the seven-day week. Several years ago this was a major contract talking point which the unions were able to block.

Resistance to the seven-day week on the part of the unions stems both from religious and social pressures (especially in Quebec) and from a general fear of the possibility of overproduction.





MANY KINDS of trades and many kinds of men make up pulp and paper's labor force. Below, a cutter whips his saw in the winter bush. At top, a mill worker helps hoist a roll of paper.

Many pulp and paper workers, remembering all too well the spectre of unemployment and short time during the hungry '30s are afraid that Sunday production would result in additional tonnages sufficient to glut the market.

The capacity increase that

(Continued on page 72)

Southern U. S. Opening Up Rich New Supply Sources

(Continued from page 70)

the Hiwassee River to draw requirements of process water.

There was an abundant supply of southern pine, satisfactory terms for forest lands within readily accessible radius of the site were obtained.

The planned development initially was to take the form of 130,000 tons of newsprint and 50,000 tons of kraft pulp annually. U. S. publishers signed 15-year contracts for the entire output of the mill before it was built.

With these questions resolved, **Bowater's Southern Paper Corp.** was organized with British equity capital to build the $60 million mill. Designed originally to produce 130,000 tons per year on its first two machines, production was stepped up to 160,000 tons shortly after operations began in July, 1954. The third machine, scheduled for operation in 1957, wider (276 in.) and faster (2,500 fpm) than the first two machines, will bring total output to 300,000 tons annually. The possibility of a fourth machine is receiving serious consideration.

The announced 100,000 ton expansion of Bowater's by 1957 represents slightly less than 25% of the new capacity coming into operation in the U. S. over the next two years.

A fast-stepper in the southern scene is **International Paper Co.** Its new $20 million newsprint mill, with a 282-in. paper machine, is slated to go into operation this fall with a capacity of 100,000 tons annually at Mobile, Ala.

Newsprint production is not new in the South. In 1940, **Southland Paper Mills Inc.** was organized and a mill was built in Lufkin, Texas, to supply the needs of the growing area. In 1955, output had jumped sharply to 140,000 tons compared with its first year when 32,000 tons was produced. This summer it was installing its third machine boosting capacity to some 215,000 tons annually.

In 1950, **Coosa River Newsprint Co.** built the second mill in the South and now has a present capacity of 150,000 tons with another machine, the third, scheduled to boost capacity to 300,000 tons by 1958.

With International's entry into production in the South, it means there are now four newsprint producers there.

Costs of wood for newsprint output in the South are rising and will probably continue to rise. The gap between southern and Canadian wood costs, some quarters believe, is likely to narrow.

Another limiting factor on southern newsprint development is water. In Canada water supply is usually no problem for most newsprint mills, since most are located on large rivers and processed water is readily available. There are not too many large rivers in the South.

Therefore, the southern paper industry customarily depends on wells for its process water supply. This adds to the original cost of construction. But, in the case of International Paper, for example, it has been able to locate where there is sufficient ground water, or has built its mills along rivers with adequate year-round flow.

The water supply problem in the South is purely a matter of original cost which may run 2% to 3% of the total mill. The extra cost is considered justified by the over-all economies of producing newsprint for southern markets in the South.

The final results of southern expansion will depend on many complex forces. The industry is reaching—if it hasn't already achieved—relative maturity.

Future expansion there likely will walk hand-in-hand or a step ahead of newsprint demand in the U. S. The new mills offer a real challenge to Canadian newsprint producers who will have to find other markets than the South in the future.

The cartoon, of course, states the situation in very simple terms. But the basic truth is there. Building a new chemical installation, paper mill, petroleum refinery or power plant is more than a "do-it-yourself" project. Lummus has built over 700 plants throughout the world. When you are ready to build your next plant, you can call in thousands of trained men — without adding to your payroll — by calling in Lummus. And remember, your process "secret" is safe with half-century-old Lummus.

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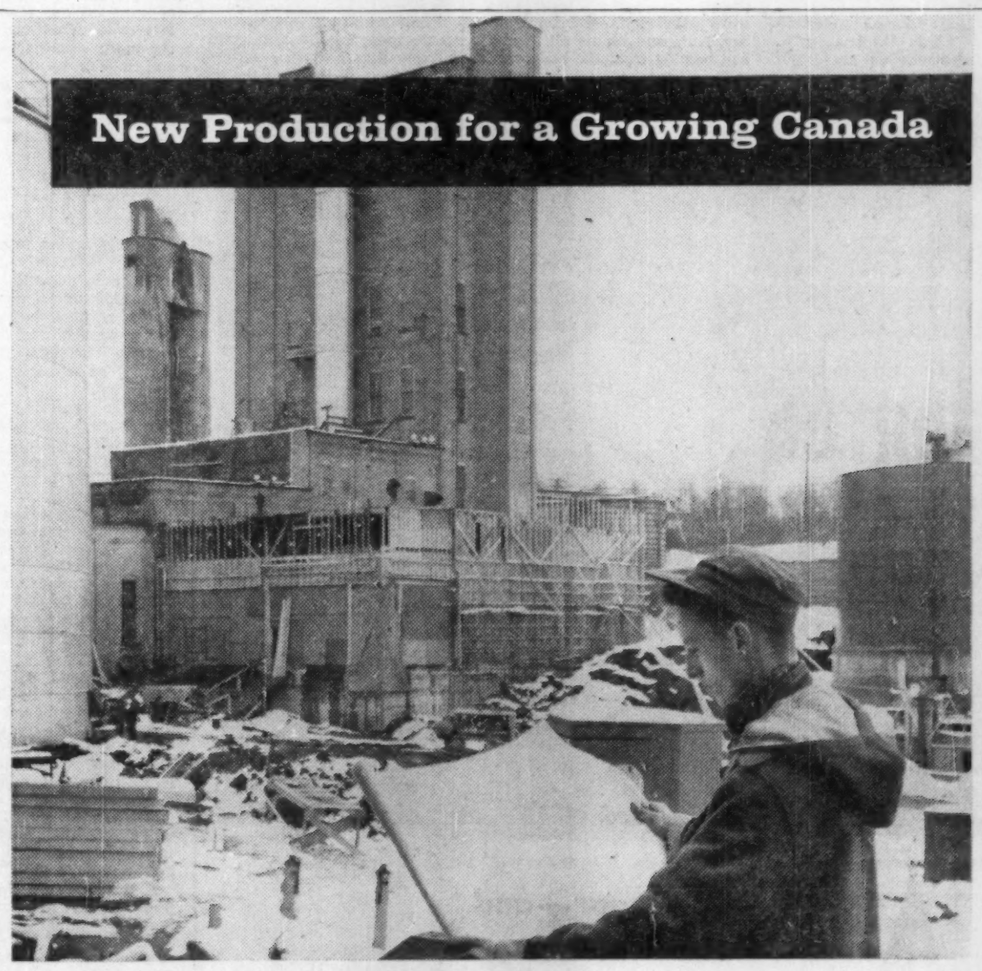

Construction crews are making every effort to complete Mando's $17 million newsprint production expansion project at Kenora, Ontario, by the first quarter of 1957.

Aimed at increasing the company's newsprint production by some 50%, the expansion includes the installation of a 276" high speed paper machine plus a new grinder room, new chemical pulp capacity; additions to the wood room and new steam and power facilities.

Substantial new production at Kenora is part of Mando's continuing multi-million dollar expansion program. Here is evidence that Mando is a growing company, better able to provide benefits to its shareholders, employees, customers and to the communities in which it operates.

THE ONTARIO-MINNESOTA PULP and PAPER COMPANY, LTD.
Mills at Fort Frances and Kenora, Ontario, Canada

Budworm Devours Tall Timber, And Industry's Profits, Too

In huge timber areas of New Brunswick and the Gaspe Peninsula of Quebec, life and death are blood brothers.

The shadow of death is in the form of a deadly insect — the spruce budworm — which stalks tall timber like a hunter after game.

Into the unequal conflict, man has thrown in assault troops on ground and in the air—research and aerial spraying—to save the forest. His decision to act was determined by cold facts.

To the pulp and paper industry, victory can be measured in terms of millions of dollars saved from destruction apparently as certain as ashes forming from a burning dollar bill.

In a 30 sq. mile area of the Green River experimental forest, near Edmundston, Madawaska County, N.B., the ravages of spruce budworm can be seen. Thousands of spruce and fir trees — paper and lumber on the hoof — are dead because of the insect.

In thousands of miles of adjoining forest, man's unrelenting war has won a major battle and lush green shoots are sprouting, trees are growing.

Aerial spraying with insecticide saved these millions of dollars in timber.

BUDWORMS NOT SNOWFLAKES: These white specks are budworm moths, killers of forests. Each moth lays several hundred eggs, which in turn hatch into budworm larvae. These larvae feed on and kill balsam, fir and spruce. Fighting this pest is a full-scale war in New Brunswick and Quebec's Gaspe.

Battle Results

Results to date of the huge and expensive battle against the insects in the forests of New Brunswick and the Gaspe Peninsula in Quebec were summarized graphically at the recent 10th World Congress of Entomology in Montreal.

After five years of spraying, said Dr. Frank Webb, "balsam fir mortality has been substantially forestalled or delayed over an area of upwards of four million acres of forest, while most of the trees and unsprayed check areas are now dead or dying."

Dr. Webb is research officer in charge of aerial spraying investigations at the Fredericton Forest Biology Laboratory of the Department of Agriculture.

Victory is not achieved without a price. Expenditures in the two provinces totaled about $8 million after last June's operation when two and a half million acres were covered. This price included large areas previously sprayed.

But the cost is low in comparison with the price at stake — dollars for millions of cords of wood.

Deputy Minister of Lands and Mines for New Brunswick, W. W. McCormack has noted: "If we can keep the wood green and growing," he says, "then we can cut it and use it, so I don't think the price for spraying is high."

Direct revenue from the forest to N.B., which foots one third of the spray bill, in the form of stumpage dues, is about $4 per cord. Total value of the production of the forest industries in N.B., with their seven pulp and paper plants and a large number of lumber mills was set at $150 million per year by Minister of Lands and Mines Norman B. Buchanan.

The concern of N.B. officials for the probable loss of the invested stands if spraying is not continued is shared by many others. James A. Vance, National Chairman of the Canadian Forestry Association, puts it this way:

Dollars in Danger

"Every dollar of the revenue from the wood-using industries starts with the living forest, and will be greatly imperiled if the budworm is not held in check."

Vance recalls in 1922, before present spraying techniques were developed, Ontario, Quebec, N.B., and Maine all took a bad beating from the budworm.

Then, the infestation ended only when there were no more nearby forests suitable for the budworms' reproduction.

However, spraying is still held as a short-term measure in the managing of a large industrial forest by entomologists and foresters who are looking for other measures to keep the insect in check in the future.

Long term potentialities of spraying are considered still obscure and intensive studies must be continued in the forest to determine the ultimate effects of repeated or periodic applications of insecticides and the complex biological balance.

The greatest hope for the future of the forest is said to be development of more resistant forests by silvicultural means.

"There is little chance of achieving this, however," Webb says, "unless large areas of vulnerable forests can be protected from decimation for a period of time until the best combinations of age-class and species composition can be developed.

Chemical control may be a means to this end, but it must be used with discrimination in combination with intelligent management planning."

One of the aerial operators actively engaged in this work to fight the budworm is F. W. "Tom" Wheeler, whose Wheeler Airlines have been supplying planes for the spray jobs.

"The projects," he says, "have been strong stimulants for development of aerial spraying in all its forms in Canada, and have done much to draw attention to this type of operation."

Plane Armada

This year the biggest armada of spray planes yet assembled for the battle — 90 — operating from 140 strips will participate in the program. In 1952, the first year of experiment in this direction, there were only 20 spray planes employed on budworm. The following year the number was raised to 77, operating from six air strips. The number was decreased to 57 the next year, and was 80 in 1955.

The budworm project has given encouragement to operators to put their equipment to wider use, to look for steady employment during the budworm season, Wheeler says.

He foresees a growing future in forest management by aircraft, including brush control, fertilizing and close range forest surveys.

"We believe that this aerial spray work will continue to grow, particularly in agriculture for the suppression of parasites and the fertilization of crops, he said.

"There is not the same scope for agricultural spray in our home areas that exists in the West, and in the fruit growing regions, but there is a fair potential nevertheless in Quebec and neighboring Ontario farming areas."

Long Labor Peace Appears Certain

(Continued from page 71)

would result from Sunday production, they readily admit, wouldn't be a straight 14% increase as the figures would first indicate. This is because machines would still have to be taken out of operation for specified periods in order that maintenance on them could be carried out.

When contract negotiations are re-opened in 1958, it seems unlikely that Eastern operators will make a serious bid for the seven-day week. Already some pulp and paper industry officials are making none too thinly veiled predictions that a condition of overproduction may be reached within the next two years unless precautions are now taken.

This view stems from the amount of new production that is scheduled to come in during the period. In light of this, it appears unlikely that the operators—although they would like the more efficient use of plant and machinery that a seven-day operation would achieve—would be willing to offer very much in the way of premium rates in return for seven-day production.

No Seven-Day Week?

Accordingly it is generally believed the seven-day week will not likely be a major factor in 1958 negotiations unless there is a large currently unforeseen increase in demand.

In 1958 union demands will likely revolve largely around better pension and other social welfare benefits. Of course there'll be demands for higher wages too.

"We're expecting to get our fair share," one union official commented, pointing out that the pulp and paper industry as a whole has been faring very well financially.

One feather in the labor caps of both the companies and the unions is that this year for the first time Canadian contract agreements appear to be setting the pattern for the industry in the U. S.—rather than the reverse which frequently was the case in the past.

Beneficial All Ways

This trend, if maintained, should prove beneficial to the union and industry alike.

It means that agreements can be reached on the basis of purely Canadian economic and business considerations, and that the issues at hand will not be clouded by reflections from the U. S. economic scene which may or may not have validity here.

A trend toward shorter work week appears to be emerging in the U. S. pulp and paper industry. Currently there is talk of a 36-hour and even a 32-hour week. Union officials here, however, don't expect that this trend will make much headway in Canada, for the present at any rate. Here the 40-hour week is almost universal with a few companies on a 36-hour six-day week.

The International union said that its membership appears to favor the five-day week, and thus likely would not press for a shorter work week which would involve working of a six-day week.

From Ocean Falls, B.C. to Grand Falls, Nfld., the big International Union now has a membership of 35,777 distributed throughout some 98 locals. It has nine locals in British Columbia, two in Manitoba, 26 in Ontario, 33 in Quebec, and 13 in the Atlantic Provinces.

By way of comparison the CCCL in the pulp and paper industry in Quebec has approximately 8,000 members in a dozen locals in the Province of Quebec.

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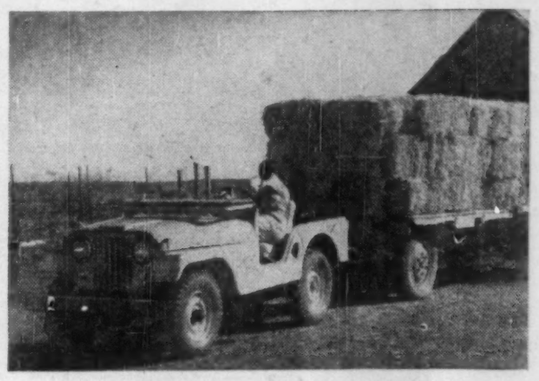

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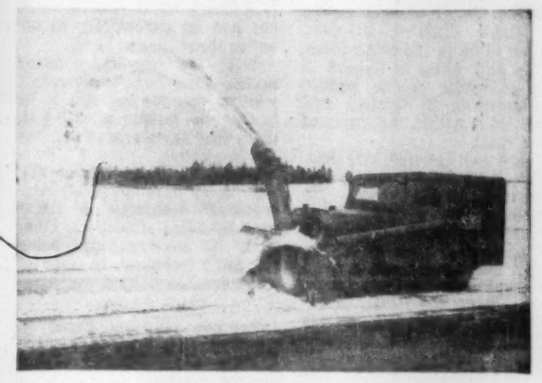

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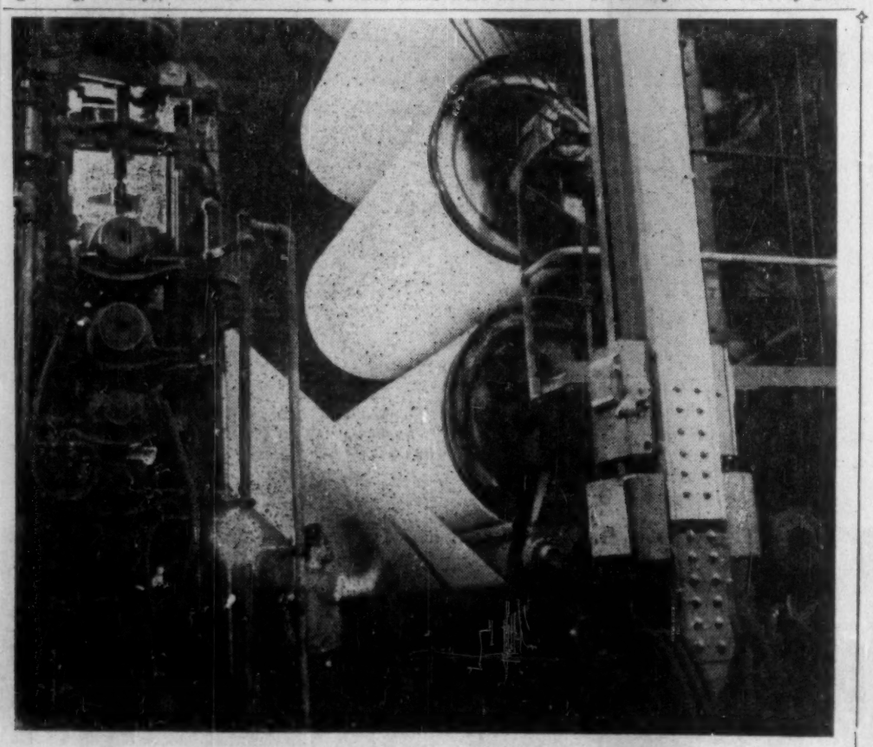

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Dissolving Pulp Mills Find Marts

Dissolving pulp has been charting a course through somewhat troubled waters in the past few years.

While most of the Canadian pulp and paper industry has been enjoying excellent markets and record production, since 1953 annual production of dissolving pulp — or chemical cellulose derived from wood — has been declining and indications are this trend will be continued this year.

Although an apparently gloomy picture at first glance, dissolving pulp mills are anything but ready to throw in the the cellulose sponge.

Here's why:

— Stepped up research, particularly into the basic chemistry of cellulose about which all too little is presently known — is expected to pay off in new uses for dissolving pulp and improvement in existing ones.

— Europe, where requirements are fast outstripping cellulose resources, is looming as a potentially big market if difficulties, particularly dollar shortages, can be overcome.

— Fortunes of the textile industry in North America, largest single outlet for dissolving pulp, appear to be improving.

— Market potential for regenerated cellulose film, cellulose sponges and similar cellulosic products—though they are smaller outlets for dissolving pulps—appears to be excellent.

U. S. Costs

— Costs of southern U. S. dissolving pulp producers, presently lower than Canadian producers' costs — are rising more sharply than costs are here.

— Demand for paper grade bleached sulphite pulp or paper pulp, has been excellent and prospects are that it will remain so. Canadian dissolving pulp makers have been able to keep their mills operating full time by supplementing declining dissolving pulp production with production of paper grade pulp.

In point of fact, production of paper grade pulp is what has saved Canadian dissolving pulp industry from a situation far more serious than the one in which it presently finds itself.

From a record production of about 430,600 tons in 1953, Canadian production of dissolving pulp has been declining steadily.

Lower output in 1954 was followed by still lower production in 1955 when 390,400 tons were produced. Current indications are total 1956 production will be about 3% below last year's levels or possibly a bit more.

At the same time, Canadian production of paper grade bleached sulphite pulp has been on the upswing. In 1953, only 415,900 tons were produced as against a record 637,400 tons last year.

Some but by no means all of this increase is due to dissolving pulp mills who bridged the gap between capacity and demand for dissolving pulp by switching to paper grade bleached sulphite.

Mills Can Switch

In this regard at any rate, the dissolving pulp industry has been fortunate. Its mills can easily turn out paper grade bleached sulphite pulp.

The reverse, incidentally, does not hold true as bleached sulphite pulp producers can't make dissolving pulp.

This is due to the fact the manufacture of dissolving pulp (as it is produced in Canada) is actually production of paper grade bleached sulphite taken several steps further by more bleaching and more cooking to produce a chemically purer cellulose.

Trouble is that while it is not physically hard for dissolving mills to produce paper grade bleached sulphite, it's not as profitable for them to make it.

The capital cost of a dissolving pulp mill is higher than that of a paper grade bleached sulphite mill and in addition, having more complex machinery, dissolving pulp mills have somewhat higher operating and maintenance costs.

Then too, by turning out paper grade bleached sulphite pulp, they are producing a product which brings a lower price than dissolving pulp.

Currently, dissolving pulp sells for about $185 per ton as against $150 per ton for paper pulp. The price difference is offset to a certain extent by the fact that production of paper pulp requires less wood, chemicals, heat and power per ton than does dissolving pulp.

Problems from U. S.

For the most part, the dissolving pulp industry's problems stem from the U. S.

Apparent Canadian consumption of dissolving pulp has been increasing over the past few years (62,100 tons in 1955 vs 49,200 tons in 1953) but unfortunately it represents only about 15% of total Canadian production.

The balance is exported mostly to the U. S. Imports into Canada of dissolving pulp are of little consequence as they repre-

(Continued on page 77)

Canada's Pulp and Paper Mills

British Columbia

COMPANY	HEAD OFFICE	MILL	PRODUCTS
Alaska Pine & Cellulose	Vancouver	Port Alice	Bleached sulphite pulp.
Alaska Pine & Cellulose	Vancouver	Woodfibre	Bleached sulphite pulp.
Canadian Forest Products Ltd. (Pacific Veneer and Plywood Div.)	New Westminster	New Westminster	Building boards
Columbia Cellulose Co.	Vancouver	Port Edward	Bleached sulphite pulp.
Elk Falls Co.	Vancouver	Duncan Bay	Pulp. Newsprint.
Howe Sound Pulp Co.	Vancouver	Port Mellon	Semibleached kraft pulp.
MacMillan & Bloedel	Vancouver	Harmac	Bleached and unbleached kraft pulp.
MacMillan & Bloedel	Vancouver	Port Alberni	Unbleached kraft pulp.
Pacific Mills	Vancouver	Ocean Falls	Groundwood, unbleached sulphite and kraft pulp, bleached sulphite pulp. Newsprint tissue, sanitary and wrapping papers. Paper boards.
Powell River Co.	Vancouver	Powell River	Groundwood and unbleached sulphite pulp. Newsprint. Building and laminated papers.
Sidney Roofing and Paper Co.	Victoria	Victoria	Groundwood pulp. Wrapping and building paper. Paper boards.
Westminster Paper Co.	New Westminster	New Westminster	Groundwood pulp. Tissue. Sanitary and wrapping papers.

Alberta

Building Products Ltd.	Montreal	Edmonton	Industrial papers.

Manitoba

Building Products	Montreal	Winnipeg	Roofing felts, sheathings, wall board, insulating papers.
Fibreboard Manufacturing	Winnipeg	Winnipeg	Groundwood pulp. Building boards.
Manitoba Paper Co.	Toronto	Pine Falls	Groundwood and unbleached sulphite pulp. Newsprint.

Ontario

Abitibi Power and Paper Co.	Toronto	Iroquois Falls	Groundwood and unbleached sulphite pulp. Newsprint. Paper boards.
Abitibi Power and Paper Co.	Toronto	Smooth Rock Falls	Bleached sulphite pulp. Chemical screenings.
Abitibi Power and Paper Co.	Toronto	Fort William	Groundwood and unbleached sulphite pulp. Newsprint.
Abitibi Power and Paper Co.	Toronto	Sault Ste. Marie	Groundwood and unbleached sulphite pulp. Chemical screenings. Newsprint.
Abitibi Power and Paper Co.	Toronto	Sturgeon Falls	Pulp. Paper boards, hardboard, particle board.
Alliance Paper Mills (Lybster and Lincoln Mills)	Merritton, Ont.	Merritton	Bleached and unbleached sulphite pulp. Book, fine, tissue and wrapping papers. Paper boards.
Abitibi Power and Paper Co.	Toronto	Port Arthur	Groundwood and unbleached sulphite pulp. Newsprint.
Acme Paper Products Co.	Toronto	Toronto	Paper boards and wrapping papers.
Beaver Wood Fibre Co.	Thorold, Ont.	Thorold	Groundwood pulp. Newsprint. Paper boards.
Brantford Roofing Co.	Brantford, Ont.	Thorold	Building papers.
Canadian International Paper Co.	Montreal	Hawkesbury	Bleached sulphite pulp. Chemical screenings.
Dominion Cellulose	Toronto	Toronto	Sanitary papers.
Don Valley Paper Co.	Toronto	Toronto	Miscellaneous fine, special industrial and wrapping papers. Paper boards.
Dryden Paper Co.	Dryden, Ont.	Dryden	Groundwood and unbleached kraft pulp. Wrapping and building papers.
Eddy, E. B., Co.	Hull, P.Q.	Ottawa	Groundwood and unbleached sulphite pulp. Book, fine, tissue and wrapping papers. Paper boards.
Gair Co., Canada	Toronto	Campbellford	Groundwood pulp.
(Dominion Mill Division)	Toronto	Toronto	Paper boards. Building boards.
(Paper Board Mill Division)	Toronto	Toronto	Paper boards.
(York Mill Division)	Toronto	Toronto	Wrapping papers. Paper boards.
Garden City Paper Mills Co.	Merritton	Merritton	Tissue, sanitary and wrapping papers.
Great Lakes Paper Co.	Fort William	Fort William	Groundwood and unbleached sulphite pulp. Chemical screenings. Newsprint.
Hinde & Dauch Paper Co. of Canada	Toronto	Etobicoke	Paper boards.
Hinde & Dauch Paper Co. of Canada	Toronto	Toronto	Paper boards.
Hinde & Dauch Paper Co. of Canada	Toronto	Trenton	Paper boards.
Howard Smith Paper Mills	Montreal	Cornwall	Soda, bleached and unbleached sulphite pulp. Newsprint, book, fine, miscellaneous fine and wrapping papers. Paper boards.
Interlake Tissue Mills, Co.	Toronto	Merritton	Miscellaneous fine, tissue, sanitary, and special industrial papers.
Kimberly-Clark Corp. of Canada	Toronto	Kapuskasing	Sanitary papers.
K.V.P. Co.	Espanola, Ont.	Espanola	Groundwood, bleached, semi and unbleached kraft pulp. Specialty and wrapping paper.
Long Lac Pulp and Paper	Terrace Bay, Ont.	Terrace Bay	Bleached kraft pulp.
Marathon Corp. of Canada	Port Arthur, Ont.	Marathon	Bleached, semi and unbleached kraft pulp.
Miller Bros. Co.	Trenton, Ont.	Glen Miller	Paper boards.
Ontario-Minnesota Pulp and Paper Co.	Fort Frances	Kenora	Groundwood and unbleached sulphite pulp. Newsprint.
Ontario-Minnesota Pulp and Paper Co.	Fort Frances	Fort Frances	Groundwood pulp. Newsprint, groundwood, printing and specialty papers.
Ontario Paper Co.	Thorold, Ont.	Thorold	Groundwood and unbleached sulphite pulp. Paper boards.
Provincial Paper	Toronto	Port Arthur	Groundwood, bleached and unbleached sulphite pulp. Book, writing and coated papers.
Provincial Paper	Toronto	Georgetown	Coated papers.
Provincial Paper	Toronto	Thorold	Newsprint, book, fine and miscellaneous fine papers.
St. Lawrence Corp.	Montreal	Red Rock	Groundwood and unbleached kraft pulp. Paper boards. Newsprint.
St. Lawrence Corp.	Montreal	Nipigon	Paper boards.
Sonoco Products Co. of Canada	Brantford, Ont.	Brantford	Groundwood pulp (mill idle).
Spruce Falls Power and Paper Co.	Toronto	Kapuskasing	Groundwood and unbleached sulphite pulp. Newsprint.
Strathcona Paper Co.	Strathcona, Ont.	Strathcona	Paper boards and wrapping paper.
Thorold Pulp Co.	Thorold, Ont.	Thorold	Groundwood pulp.
Welland Pulp Products	Thorold, Ont.	Thorold	Groundwood pulp.

Quebec

Anglo-Canadian Pulp and Paper Mills	Quebec	Quebec	Groundwood and unbleached sulphite pulp. Newsprint. Paper boards.
Barrett Co.	Montreal	Joliette	Building and roofing papers and felts.
Bennett	Fort Chambly, P.Q.	Chambly Canton	Building and specialty boards.
Bishop Asphalt Papers	Portneuf Station, P.Q.	Portneuf Station	Building papers.
Breakey, John	Breakeyville, P.Q.	Breakeyville	Groundwood pulp.
Building Products	Montreal	Pont Rouge	Paper boards. Insulating board papers
Building Products	Montreal	Montreal (Ville La Salle)	Building papers. Roofing felts.
Canada Paper Co.	Montreal	Windsor Mills	Groundwood, bleached and unbleached kraft pulp. Wrapping paper. Paper boards.
Canadian Glassine Co.	Quebec	Quebec	Glassine and greaseproof papers.
Canadian Johns-Manville Co.	Toronto	Asbestos	Building papers, paper boards (from asbestos).
Canadian International Paper Co.	Montreal	Gatineau	Groundwood, bleached and unbleached sulphite pulp. Newsprint.
Canadian International Paper Co.	Berlin, N.H., U.S.A.	La Tuque	Bleached, semi-bleached and unbleached kraft pulp. Liner boards.
Canadian International Paper Co.	Montreal	Trois Rivieres	Groundwood and unbleached sulphite pulp. Newsprint. Paper boards.
Canadian International Paper Co.	Montreal	Timiskaming	Bleached and unbleached sulphite pulp. Chemical screenings.
Carey, The Philip Co.	Lennoxville, P.Q.	Lennoxville	Unbleached kraft pulp. Paper boards (from asbestos).
Consolidated Paper Corp.	Montreal	Shawinigan Falls	Groundwood and unbleached sulphite pulp. Chemical screenings. Newsprint.
Consolidated Paper Corp.	Montreal	Grand'Mere	Groundwood and unbleached sulphite pulp. Newsprint. Pulp boards.
Consolidated Paper Corp.	Montreal	Port Alfred	Groundwood and unbleached sulphite pulp. Newsprint. Wrapping paper.
Consolidated Paper Corp.	Montreal	Trois Rivieres	Groundwood, semi-bleached and unbleached kraft pulp. Newsprint and kraft paper.

(Continued on page 77)

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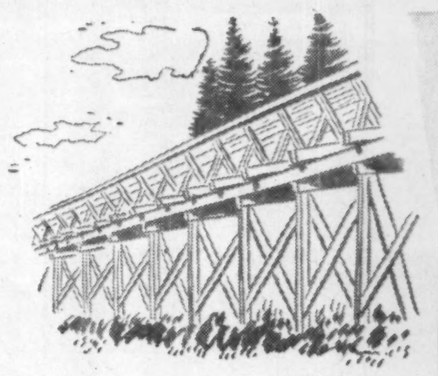

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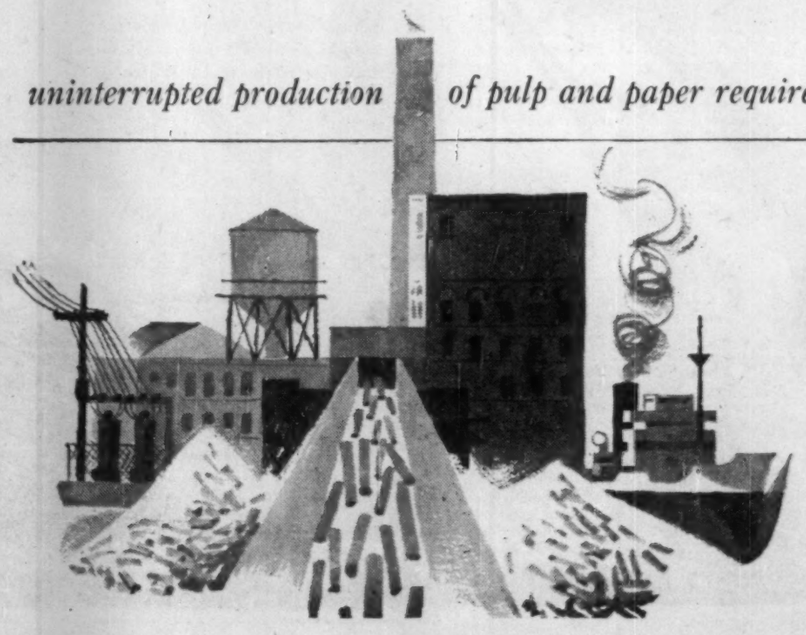

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Sales Worries For Fine Paper

FINE PAPER streams out of a machine, glistening like a sheet of new ice.

While total production in Canada's fine and specialty paper industry this year is edging forward to another new high, this is essentially a domestic business.

As a result, future growth is closely tied to population increase and is perhaps largely dependent upon government action, if any, on customs tariffs.

The fine paper industry is caught in a squeeze:

—Reasonable tariff protection is essential for the continuity, prosperity and development of the specialty and fine paper mills.

—The U. S. markets can't be opened to Canadian mills even by a reduction in their tariff rates since Canadian costs for these grades are generally higher than those of the mass producing mills in the U. S. making a similar grade.

If Canadian tariffs were reduced, it would result in Canadian mills having to reduce their prices to the entire domestic market on a wide range of grades. This would be essential to hold as much as possible their present market.

Most western Canada markets would probably have to be abandoned. In order to meet competition from U. S. mills today, it is necessary even under present rates for domestic mills here to absorb about 40% of the freight costs to these points. In most cases, these range from $23 to $34 per ton.

That's the opinion of E. Howard Smith, president of Canada's largest fine paper producer, Howard Smith Paper Mills Ltd. He outlined these points in a brief to the Gordon Commission on Canada's economic prospects earlier this year.

No Tariff Changes

There is no indication that there will be any change in tariff regulations, at least in the foreseeable future, but it is an important consideration of the industry. Meanwhile, here's the picture:

In 1955, fine paper production in Canada was about 100,000 tons, some 92% of which was for domestic market while the remainder, about 8,000 tons was for export.

By 1980, based on straight line projection of per capita consumption of fine papers in the years 1920-54, total domestic demand will total about 237,343 tons or 2¼ times the 1955 figure. Estimated demand on the Canadian industry includes exports of 18,275 tons.

That's a healthy jump and strikes at the root of one of the industry's most ticklish problems, mass production.

The main feature of the industry today, aside from being mainly for the home market, is that it supplies a wide range of products in comparatively small volume of most grades.

While total production has increased greatly over the past 50 years, the range of products made has also increased and it seems likely that this range will continue to increase as new uses for paper are found and as Canadian consumption of certain grades which are now imported increases to the point where they can be manufactured economically in this country.

Canadian consumption is small compared to U. S. because U. S. population is about 11 times Canadian and there is greater per capita usage of paper in that country. The problems:

—Canadian demand for each grade, weight, color, finish, etc. is relatively small, as a result mass output is impractical, and necessitates frequent and costly process changes on high-cost equipment operated by highly paid and skilled personnel.

Imported Equipment

—Canadian equipment is largely imported from the U. S. at costs above U. S. mills, due to Canadian customs duty. It is estimated capital outlay in construction and equipment by these mills in Canada is some 25% greater than in the U. S.

—Production costs here are greater because of the limited size of the market and the higher capital investment.

—Overhead in the U. S. is lower because of ability of U. S. producer to operate on a seven day week when volume is available compared with six days in this country.

—Another disadvantage in Canada is that an overwhelming proportion of tonnage of these grades is made from wood pulp and pulpwood costs of these mills are on the whole higher than to mills making similar grades in the U. S. The reasons:

—Cutting and hauling of pulpwood, especially in the south, is on a hand to mouth basis. Thus they carry much smaller inventories—with a consequent saving in interest cost per cord of wood used.

—Rail costs on pulpwood in Canada are far higher than in the U. S. for equal distances of haul.

In the past, it has been felt that the advantages of southern U. S. mills were offset to some extent by the long haul on the finished product to Canada.

However, recent developments in the U. S. of hardwoods for pulping have greatly improved the position of the northeast and north-central states and many of these areas are within easy reach of Canada's largest market for fine paper.

Canadian mills manufacturing fine and specialty papers are pretty well concentrated in Ontario and Quebec due to the big market in these regions.

What Are They?

What are fine and specialty papers?

There is no clear-cut line between the two. The Canadian Pulp and Paper Association in general classifies them under the heading of book, writing and groundwood papers. In CPPA statistics this classification reached a record production level of 215,000 tons in 1955 compared with 206,000 the previous year.

In the face of booming demand—25% higher in June this year over the same month the previous year—and up 13.3% at 124,160 tons in the first six months against 109,574 tons in the like period of 1955—it looks assured Canadian mills will hit another new high this year. In the first seven months output was up almost 16% from last year and should be this much higher for the full year.

Prices advanced earlier this year for many grades. Mills are running capacity plus. There's no letup in sight. July output was up 34%.

The big feature in the recent market situation has been the sharp jump in exports, reflecting strong demand. In June, they were up 115% compared with a 31% drop in June last year.

The seasonal trend in summer months is usually down in output but that certainly wasn't the case this year. That's undoubtedly because of the high-stepping demand in the U. S. where the industry is running full tilt to try to keep pace with requirements.

The CPPA figures including fine, book and miscellaneous papers are lumped but a breakdown prepared for the Gordon Commission last year showed fine paper output of 100,900 tons, book production, 96,800 tons and miscellaneous fine paper output of 17,100 tons estimated for the year.

The Output

Output of fine paper, book and miscellaneous fine paper mills of some 215,000 tons was almost half the total output of some 440,000 tons for all fine and specialty papers last year.

The breakdown on the remaining tonnage: groundwood printing and specialty, 79,000; tissue, 16,000; sanitary, 87,000; wrapping, 34,000; special wrapping, 6,000. More than 90% of the total output was for the domestic market.

Fine and specialty papers include about 800 grades ranging in thickness from lightweight tissues, which caliper about two one-thousandths in. to heavy Bristols having a maximum thickness of about 40 one-thousandths in.

In quality the grades range from halftone news, which contains only slightly less groundwood than newsprint, through chemical wood pulp grades such as book, envelope, tablet, coated papers, bonds and writing papers, to grades made wholly from rags, cotton or flax pulp.

These papers serve the general and basic requirements of the nation's business and cover papers used in the form of stationery, business forms, envelopes, bank notes, advertising, text books, periodical publications, etc.

In addition, many specialty grades are manufactured for specific end uses such as cigarette paper, paper for drinking cups, wallpaper, milk containers, paper for wrapping bread, greaseproof, glassine, etc.

Consumer products are those products which serve the sanitary requirements of the nation and constitute a second division of "white papers" aside from the fine and specialty division.

In addition to making paper stock, the mills generally convert this into the finished packaged products. These include: toilet tissues, facial tissues, sanitary napkins, serviettes, paper towels and special sanitary products for hospitals.

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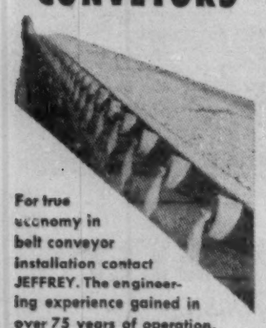

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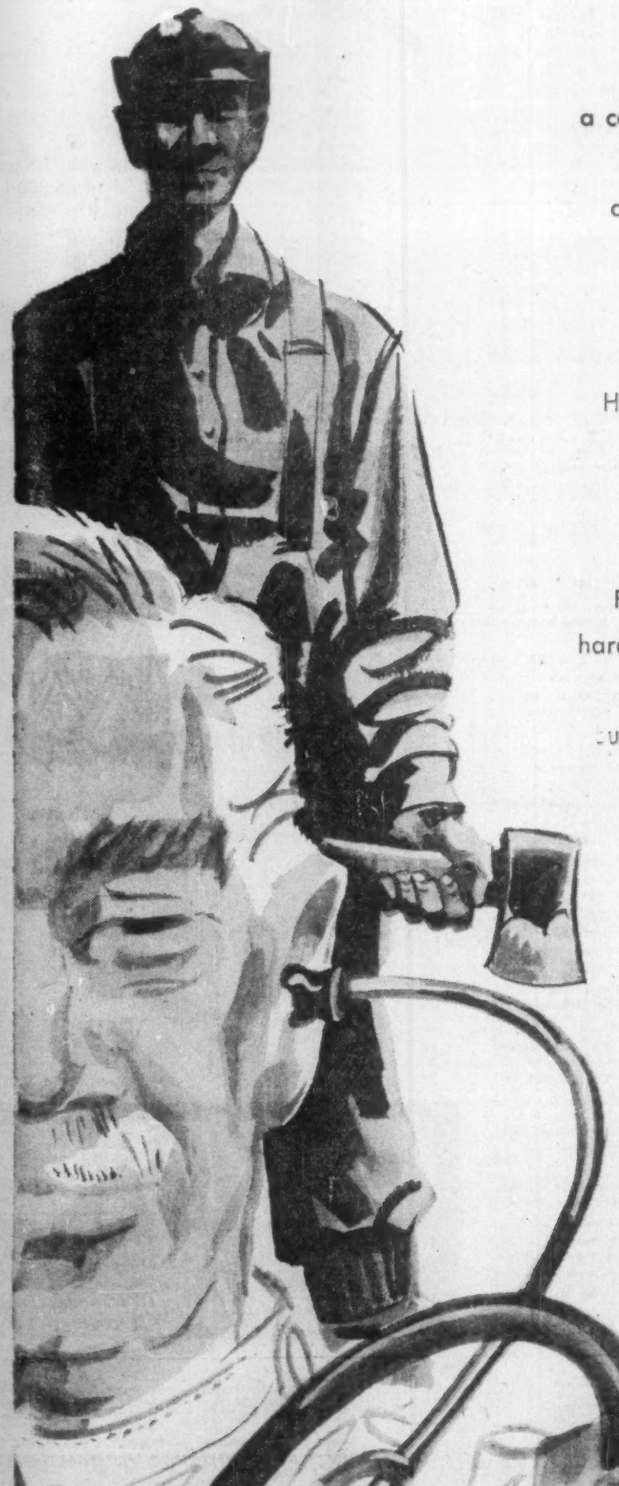

The health of Canada's forests must always be the first concern of a company like ours. To keep the forests free from disease, to protect them from fire, to stave off decay, is our first duty — for the forests are a major natural resource of the people of Canada. And so our scientists and our foresters are constantly at work devising new ways to keep the forest healthy.

To us, conservation means wise use, as well as good husbandry. Here our company has made great strides, too. We're still turning out newsprint, of course — at a rate of over 900,000 tons yearly. by diversifying our line of forest products, we're now able to achieve complete utilization of our forest resources.

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CANADIAN INTERNATIONAL PAPER COMPANY

SUN LIFE BUILDING MONTREAL, QUE.

B. C. Getting Four New Mills, Two More on Planning Boards

With four mills under construction, at least two more in the planning stage and reports of other mills likely to be built in the near future, British Columbia continues to ride high in the pulp and paper parade.

B. C. kraft pulp, sulphite pulp and newsprint are now well known throughout the world, and the fame of the area as a pulp and paper manufacturing centre has rapidly spread in recent years.

One effect of this development has been the creation of an important reserve of technical talent in this province, one aspect of this being illustrated by the fact that Vancouver engineering firms are today designing and supervising construction of more new pulp and paper mills than any others.

Their operations extend far beyond the borders of Canada—to Pakistan, the southern U. S., South America and Europe.

But in an economic sense the nine big pulp and paper mills currently in production are of first significance. Last year they produced 678,675 tons of various types of pulp, 728,888 tons of various kinds of paper.

Value of their production last year was $200 million. Growth of this industry in B. C. is illustrated by the fact that value of production has more than quadrupled during the busy decade since the war.

High Level

That this expansion will continue is indicated by the high level of construction now being maintained by the industry. One company alone is spending more than $60 million on new mills.

MacMillan & Bloedel, which is doubling capacity of its graft mill at Port Alberni, building an entirely new newsprint mill there and complementary board mills and a bag plant.

Another company, **Crown Zellerbach Canada,** has just completed its new kraft pulp mill at its **Elk Falls Co.** operation at Duncan Bay, near the mouth of Campbell River on Vancouver Island.

The same company is starting construction of an additional newsprint mill at the same site to operate with the original plant completed only four years ago.

Also on Vancouver Island is **British Columbia Forest Products'** $36 million bleached sulphate pulp mill now under construction at Crofton, and this is expected to be in operation late in 1957.

Celgar, Ltd., a subsidiary of **Canadian Chemical & Cellulose** which also has an operating bleached sulphite pulp mill at Prince Rupert **(Columbia Cellulose Co.)** has until 1958 to start construction of a $30 million pulp mill near Castlegar in the southern interior of the province according to an agreement with the Provincial Government.

But it was announced a few days ago that this date will probably be advanced and there is a good prospect of construction being initiated next year.

Another pulp mill for the interior is planned by **Western Plywood Co.,** which has been successfully producing plywood at three locations in B. C., and has just started producing at a new plant in Edmonton.

Western Plywood hopes to obtain a forest management license which will make it possible for it to proceed with establishment of a pulp mill at Quesnel Lake, a few miles from one of its plywood mills.

Advent of the pulp industry in the interior of British Columbia will be in line with a trend in lumber production. A few years ago the coast sawmills dominated the lumber industry, sparked by the growing export trade.

But during the past two or three years there has been an upsurge in production of lumber in the interior—in the Prince George, Kamloops, Cariboo and Nelson districts.

While these mills are denied access to cheap water transportation they have developed a prosperous rail trade with some of the continent's most profitable markets and they have created a big potential supply of chips which can be readily converted into various forms of commercial pulp.

It may not be considered economical to ship large quantities of bulky chips by rail to the coast—a fact which encourages the idea of pulp mills being established in the interior.

THIS WHOLE LOG chipper, at Powell River, B.C., can reduce a 30-ft. log, 26 in. in diameter, to tiny uniform chips in 30 sec.

The dependence on railroads, for instance, has not discouraged the **St. Regis Paper Co.,** one of the largest in the U. S., from going ahead with its big new $30 million pulp mill at Hinton, Alberta.

It has been demonstrated time and again that while cheap transportation is a desirable factor for any pulp mill promotion, there are other factors such as abundance of good pulpwood, waterpower, other forms of energy and water that are equally important.

The B. C. government announces that it is now considering proposals for the building of a $20 million pulp mill in the Peace River area which would eventually be served by a northern extension of the government-owned **Pacific Great Eastern Railway.**

Not until the second decade of the present century did the industry become solidly established. This was the era that saw Powell River and Ocean Falls become the site of mills that were eventually to become leaders in their field, **Powell River Co.'s** newsprint mill being today the world's largest producer, with more than 1,000 tons rolling from the machines daily.

The company is installing its ninth machine this year and it will be in operation during the coming winter. Ocean Falls, of course, was the base of Pacific Mills, a producer of diversified pulp and paper products which is now one of the many divisions of the Crown Zellerbach organization.

Items now produced by the industry in this province range from dissolving pulps to tissue papers, towels and newsprint.

A new plant built this year by **Alaska Pine & Cellulose,** in which **Rayonier Inc.** has a controlling interest, will produce a fluid used for oil well drilling, the raw material being the bark of the hemlock tree, previously wasted and seeming unusable.

Great progress has been made in wood utilization through small wood, salvage logs and mill residue recovery. It is estimated that the pulp and paper industry recovered about 490 million board feet of wood which would otherwise have been wasted or put to less economic use.

Only seven years ago there were no facilities for using this material.

Expansion of the pulp and paper industry has been an important factor in development of hydro-electric capacity.

Powell River Co.'s current $20 million expansion could not have been undertaken without the assurance of increased power from the Bridge River area **(B. C. Power Corp.),** and the rise in pulp production on Vancouver Island would have been impossible without development of power at Campbell River by the **B. C. Power Commission.**

Ten years ago the Sloan Commission made an inquiry into all phases of the province's forest resources and its report at that time set the pattern for administration during the past historic decade.

The commission's second report, likely to be presented to the legislature at its next session early next year, may well set the course of the $500 million forest industry for the next decade or for an even longer period.

The Sloan commission is a one-man body represented by Chief Justice Gordon Sloan.

He undertook his first inquiry into the forest situation in 1945 as a result of the then Government's desire to look into the whole question of forest administration and especially to examine the validity of the claims made in some quarters that the province's forests were being liquidated at a rate that threatened early depletion.

Heard Witnesses

Chief Justice Sloan heard scores of witnesses from all divisions and levels of the industry, and he brought down a report that was welcomed in almost every quarter as one that set a safe course for the future.

One of the principal points emphasized by Chief Justice Sloan was that provision would have to be made for a form of forest management that would enable the forests to be used in an orderly manner over the years without serious overcutting.

The principle of sustained yield was advocated, and to achieve that principle it was recommended that the Government undertake to issue forest management licenses that would commit the holder to a form of controlled operation, keeping his annual cut of timber to a limit authorized by the provincial forest service so that it would, in general, correspond with the natural growth of the forest.

As an inducement for people to apply for such licenses it was

(Continued on page 76)

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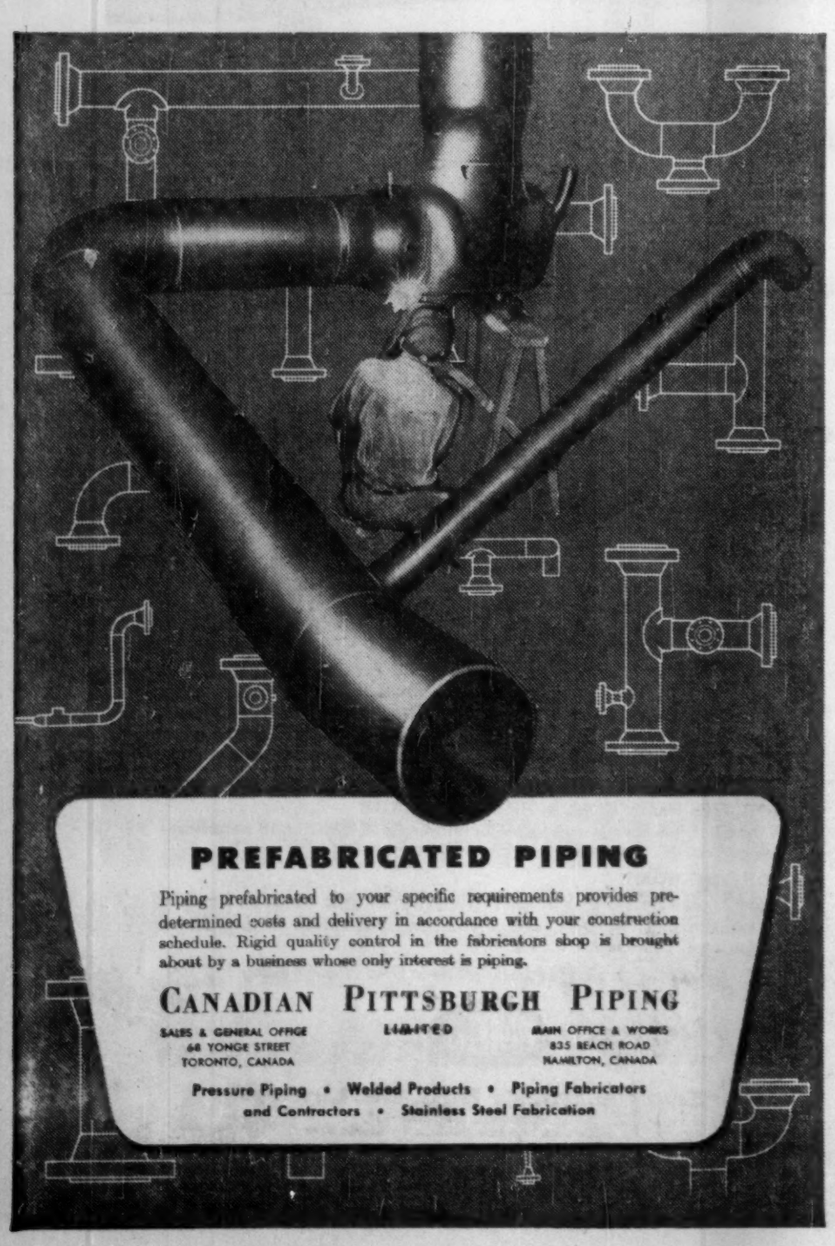

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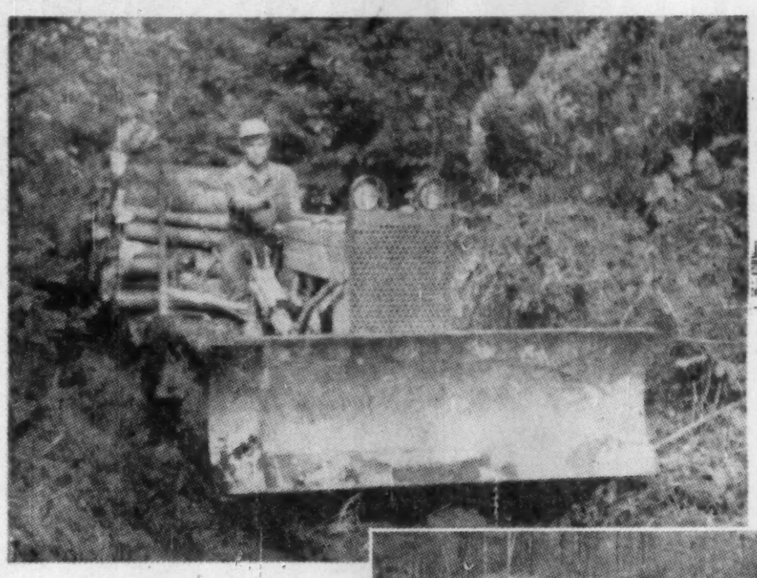
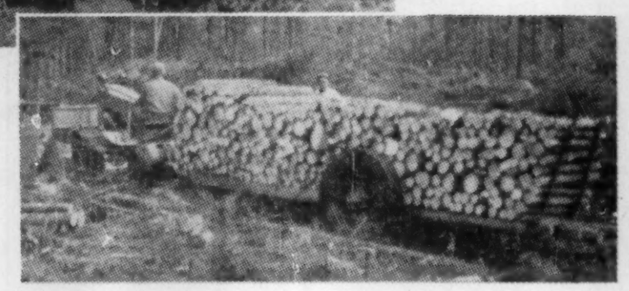


LITTLE GIANT of FIELD and FOREST



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"Little Giant" and "pulling fool" are some of the pet terms the pulp men use to describe this simple, powerful, easy-to-understand tractor that's always ready to go.

Ask these men about their John Deere Crawlers and they will say what Mr. Dodier says: "For economy, flotation and stability, I do not think the John Deere Crawler can be beat."

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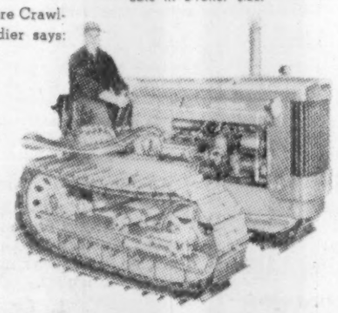
. . . Emilien Dodier, St. Isidore d'Aukland, Quebec

Below: The John Deere 4-Roller Crawler. Also available in 5-roller size.



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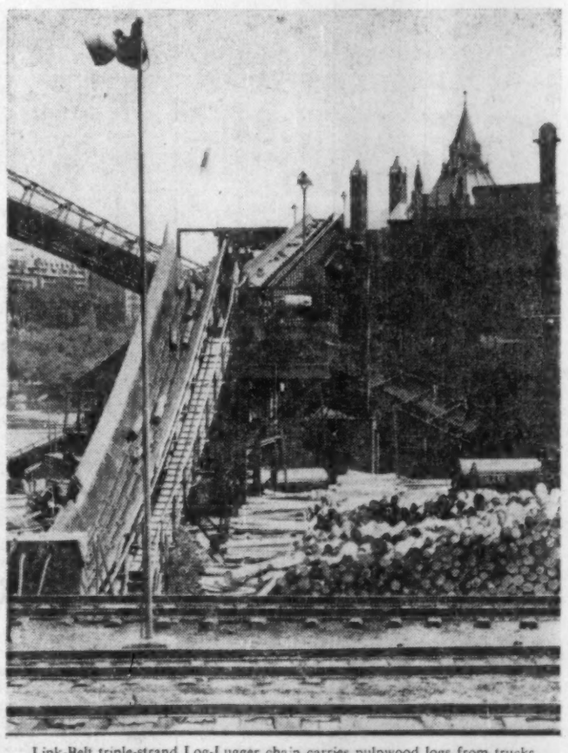

Link-Belt triple-strand Log-Lugger chain carries pulpwood logs from trucks and railroad cars. It discharges them into 36-in. wide Link-Belt flat belt conveyor which empties onto a storage distribution conveyor or sends logs down a steep chute to the woodroom conveyor.

System handles rail and truck shipments simultaneously

TO KEEP pace with the increase in world demand for paper, the E. B. Eddy Company has spent over two million dollars in expanding and modernizing their sulphite mill and its related wood handling facilities at Hull, Que. And Link-Belt conveyors keep the mill supplied with over 500 cords of wood per day.

This Link-Belt-engineered conveyor installation is another instance of Link-Belt's continuing efforts to aid in making materials handling more efficient. It's also an example of how Link-Belt offers one dependable source . . . one undivided responsibility for a completely modern system.

Same dependable equipment and complete engineering can help bring your mill up-to-date while reducing overhead through greater efficiency. Whether you need an individual component or an entire system, call the Link-Belt office nearest you for counsel. A conveyor specialist will be glad to analyze your requirements . . . at no obligation, of course.

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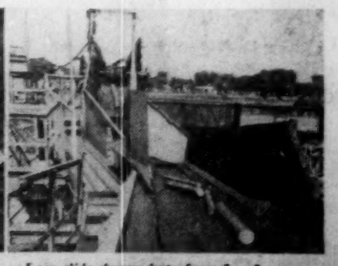
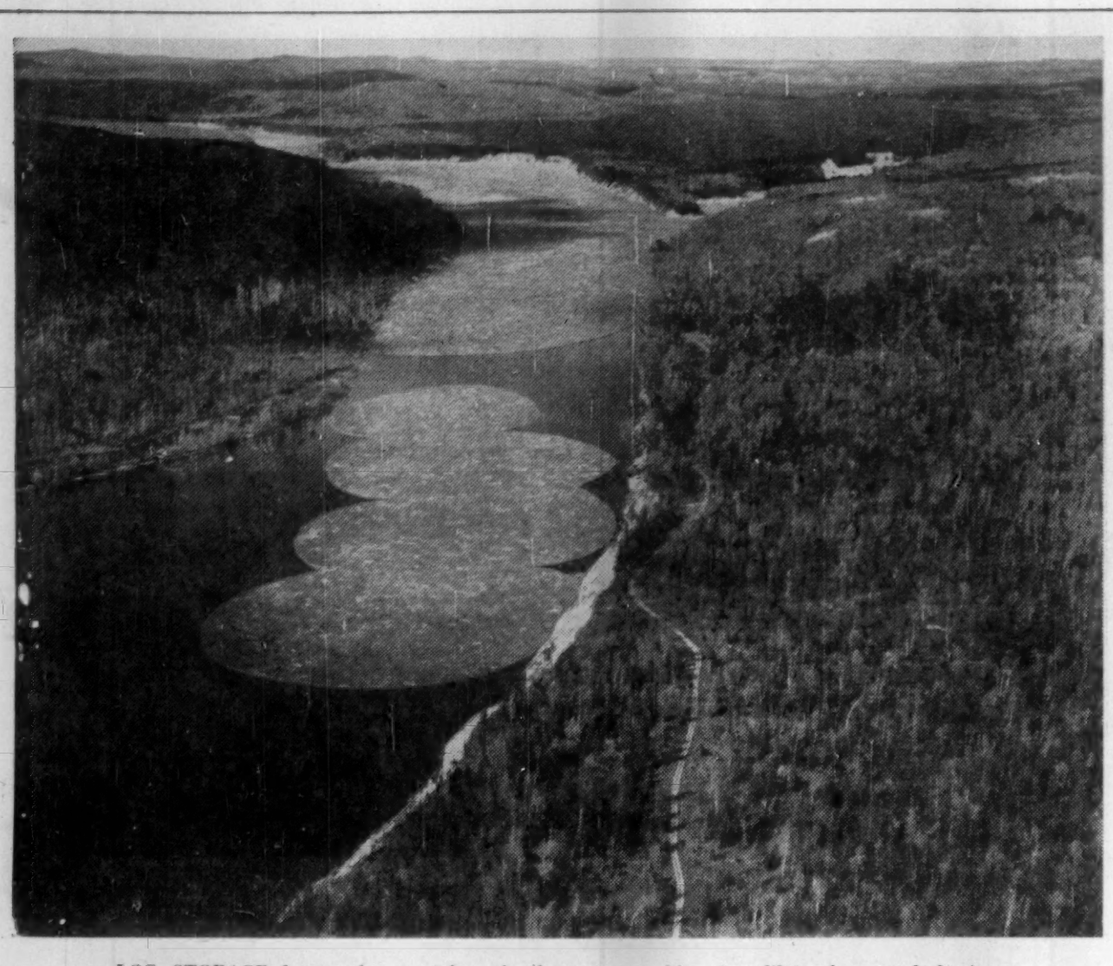
Logs are rolled from box cars on either side to Link-Belt double-strand chain conveyor for trip to main conveyor. Notice Link-Belt enclosed gear drive in foreground.

Link-Belt slasher chain moves 16-ft. logs through saw for cutting into 4-ft. lengths. Slasher discharges them onto Link-Belt double-strand chain conveyor.



Logs slide down chute from Log-Lugger chain conveyor onto main belt. Link-Belt impact idlers protect belt from damage as it travels at speed of 300 fpm.



LOG STORAGE booms form mighty circular patterns, like giant lily pads on a dark river.

Battling B. C. Forest Rights

(Continued from page 75)

made a part of the management system that the Government would add from its own stock of state-owned timber a sufficient amount of standing forest to make it possible for the license holder to maintain or even increase his present rate of processing and utilization without endangering his future supply.

Made to Order

Such a system, of course, is made to order for a province such as B. C., where the Government actually owns more than 90% of the timber.

In the U. S., for instance, where the state's ownership of timber is very much less the Government would not have enough timber to make the plan workable.

Actually, acquisition of forest management licenses in B. C. is a complicated and costly business; it is no "giveaway," as some opponents of the plan have charged.

The private operator must guarantee to protect the entire block of timber from fire and other agencies of destruction and to abide by the orders of the forest service throughout the period of tenure.

He must also pay stumpage fees on the timber as it is cut and carry out many other obligations.

If he fails to carry out his part of the bargain he may be compelled to forfeit his right to operate the timber and thus imperil his whole stake in the industry.

The intensive rivalry that has been developed by the forest management system was dramatically highlighted at the final session of the second Sloan Commission inquiry a few weeks ago in Victoria.

The companies concerned were MacMillan & Bloedel on one side and **Canadian Forest Products** on the other.

Both are very large companies, operating pulp mills, lumber and plywood mills and with extensive timber holdings — but with this difference — MacMillan & Bloedel have forest management licenses; Canadian Forest Products, although it has made application for licenses, has none.

When MacMillan & Bloedel presented its testimony to the Sloan Commission earlier in the summer it made the somewhat startling recommendation that no additional management licenses be granted in the Vancouver forest district which includes Vancouver Island and some of the choicest timber in the province.

This recommendation was immediately hailed by Canadian Forest Products and some other "have not" operators as indicative of a dog-in-the-manger attitude.

Spokesmen for Canadian Forest Products argued that MacMillan & Bloedel merely wished to perpetuate that company's position in the industry regardless of the effect on others.

This controversy is only one of many indications of the contentious nature of the whole question of forest management.

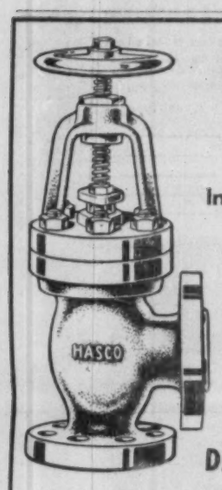
Started to Fight

Long before the big companies started to fight among themselves and charge discrimination, representatives of the smaller companies — the independent sawmill operators and loggers were sniping at the system, claiming that favoritism was being shown and that the whole system was "rigged" against the little fellow.

The Government and the large companies had their answer to that, of course. They could point out that without a guaranteed supply of timber there could be no guarantee of long-term, stabilized industry and employment, but many of the dissatisfied sawmillmen and loggers remained unimpressed.

Controversy over forest management licenses took its most spectacular turn during the last session of the legislature when the minister of lands and forests resigned under fire when charges were brought against him in connection with the issuance of forest management licenses.

Repercussions of this action were to provide the ammunition for the bitterest phases of the provincial election campaign in B. C. this month.



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made of HASCO-O-SEVEN analysis stainless steel and other corrosion resistant alloys.

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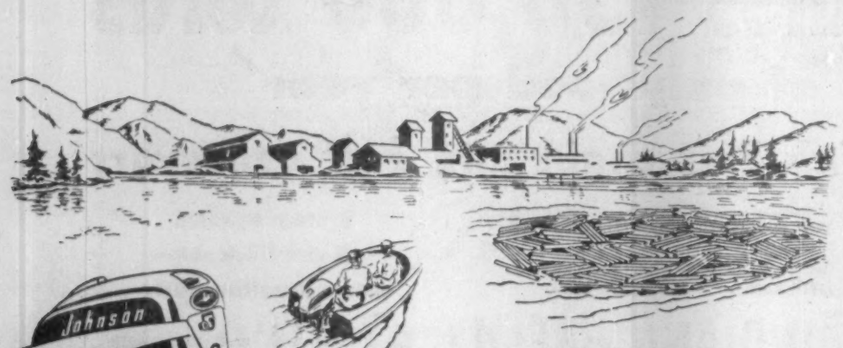

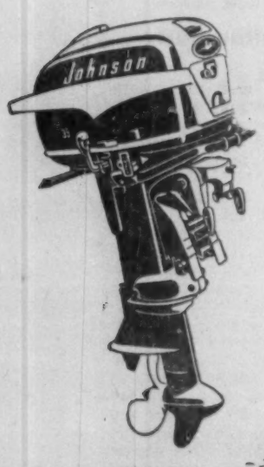

The new Johnson 35 H.P. — full gearshift; plug-in fuel tank; takes remote controls. Three models: Golden Javelin; Electric Starting and Standard.

Johnson

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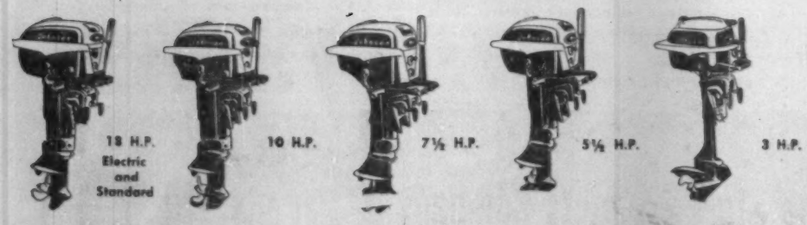
handiest power on the water!

• In the lumbering, mining, commercial fishing and transportation industries, work and transportation problems on the water are easily handled by Johnson outboards. With time, manpower and money-saving efficiency too, industry-approved over the years for their economy, safety, low cost maintenance, Johnson outboards are recognized for their ability to handle heavy loads over long periods, to stand up under the most rugged conditions. With 9 models, ranging from 3 to 35 H.P., there's a Johnson outboard "right" for every job.

For full information on the versatility of these new outboards, write today or see your Johnson dealer. You'll find him listed under "Outboard Motors" in your 'phone book.

Johnson Sea-horse outboard motors are made in Canada with sales and service facilities in every community coast to coast



18 H.P. Electric and Standard — 10 H.P. — 7½ H.P. — 5½ H.P. — 3 H.P.

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CORPORATION OF CANADA LTD.

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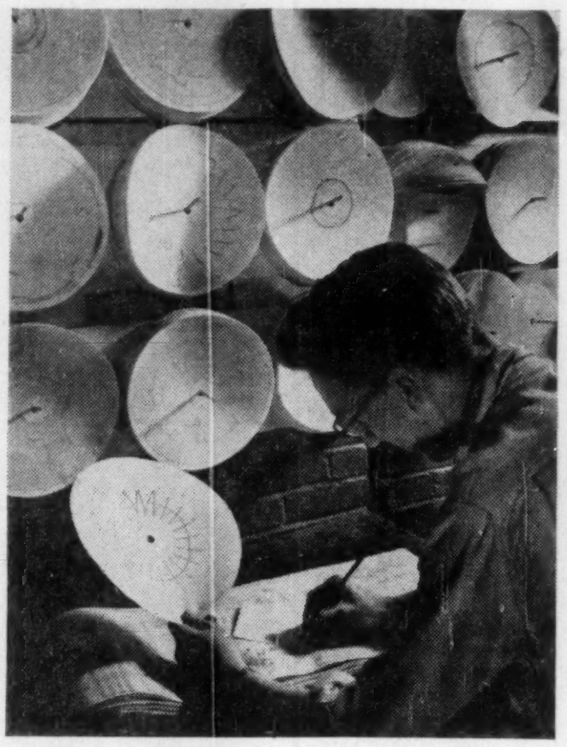
Canada's Pulp and Paper Mills

COMPANY	HEAD OFFICE	MILL	PRODUCTS
Consolidated Paper Corp.	Montreal	Cap-de-la Madeleine	Groundwood, semi-bleached and unbleached kraft pulp. Newsprint and kraft paper.
Dominion Paper Co.	Montreal	Kingsley Falls	Groundwood pulp. Wrapping paper.
Donnacona Paper Co.	Quebec	Donnacona	Groundwood, unbleached sulphite and other pulps. Newsprint. Building boards.
Donohue Bros.	Quebec	Clermont	Groundwood pulp. Mechanical screenings. Newsprint.
Eddy, E. B., Co.	Hull, P.Q.	Hull	Groundwood, bleached and unbleached sulphite pulp. Newsprint, book, fine, wrapping and tissue papers. Paper boards.
Ford, J. and Co.	Portneuf Station, P.Q.	Portneuf Station	Book, sanitary, special industrial, wrapping and building papers. Felt.
Gair Co. Canada	Toronto	Montreal	Paper boards.
Gaspesia Sulphite Co.	Quebec	Chandler	Unbleached sulphite pulp. Chemical screenings.
Gulf Pulp and Paper Co.	Quebec	Clarke City	Groundwood pulp. Mechanical screenings.
Howard Smith Paper Mills	Montreal	Beauharnois	Book, fine, miscellaneous fine and tissue papers. Paper boards.
Howard Smith Paper Mills	Montreal	Crabtree Mills	Groundwood pulp. Groundwood printing and specialty, book, fine, miscellaneous fine, tissue and sanitary papers.
International Fibre Board	Montreal	Gatineau	Groundwood pulp. Building boards.
Lake Megantic Pulp Co.	Lake Megantic, P.Q.	Lake Megantic	Groundwood pulp.
Lotbiniere Pulp and Paper Co.	Danville, P.Q.	Nicolet Falls	Groundwood pulp. Mechanical screenings.
Louiseville Pulp and Wallboard Mfg.	Montreal	Louiseville	Groundwood pulp. Building boards.
Maclaren, James Co.	Buckingham, P.Q.	Buckingham and Masson	Groundwood and unbleached sulphite pulp. Newsprint. Chemical screenings.
Masonite Co. of Canada	Montreal	Gatineau	Building boards.
Megantic Manufacturing Co.	Lac Megantic	Lac Megantic	Groundwood pulp. Building boards.
Milmont Fibreboards	Montreal	Montreal	Wet machine boards.
Mohawk Corp.	Riviere de Loup P.Q.	Riviere du Loup	Groundwood pulp.
Nairn Falls Pulp Co.	Clermont, P.Q.	Clermont	Groundwood pulp.
Price Bros. and Co.	Quebec	Kenogami	Groundwood, bleached and unbleached sulphite pulp. Newsprint. Paper boards.
Price Bros. and Co.	Quebec	Riverbend	Groundwood and unbleached sulphite pulp. Chemical screenings. Newsprint.
Price Bros. and Co.	Quebec	Jonquiere	Groundwood pulp. Special industrial papers. Paper boards.
Pulp and Paper Research Institute of Canada	Montreal	Montreal	Experimental manufacture of pulp and paper.
Quebec Fibre Products	Quebec	Industrial Centre No. 5, Quebec	Wet machine boards.
Quebec North Shore Pulp and Paper Co.	Montreal	Baie Comeau	Groundwood and unbleached sulphite pulp. Newsprint.
Richmond Pulp and Paper Co. of Canada	Montreal	Bromptonville	Groundwood and semichemical pulp. Newsprint.
Rolland Paper Co.	Montreal	St. Jerome	Book and fine papers.
Rolland Paper Co.	Montreal	Mont Rolland	Book and fine papers.
Ste. Anne Paper Co.	Toronto	Beaupre	Groundwood and unbleached sulphite pulp. Newsprint.
St. Lawrence Corp.	Montreal	Dolbeau	Groundwood and unbleached sulphite pulp. Newsprint.
St. Lawrence Corp.	Montreal	East Angus	Groundwood and unbleached kraft pulp. Sanitary, wrapping and building papers. Paper boards.
St. Lawrence Corp.	Montreal	Trois Rivieres	Groundwood and unbleached sulphite pulp. Newsprint.
St. Raymond Paper	Montreal	St. Raymond	Groundwood pulp. Newsprint. Groundwood printing and specialty papers.
St. Raymond Paper	Montreal	Desbiens	Unbleached sulphite pulp. Chemical screenings.
Soucy, F. Flo., Reg'd	Chemin du Lac	Chemin du Lac	Groundwood pulp.
Sterling Paper Mills	Kingsley Falls	Kingsley Falls	Groundwood pulp, wrapping papers.
Wilson, J. C.	Montreal	St. Jerome	Groundwood pulp.
Wilson, J. C.	Montreal	Lachute	Sanitary and wrapping papers, paper boxes.
Yamaska Mills, Inc.	St. Pie, P.Q.	St. Pie	Building boards.
New Brunswick			
Bathurst Power and Paper Co.	Bathurst, N.B.	Bathurst	Groundwood, mechanical screenings. Unbleached sulphite and kraft pulp. Chemical screenings. Paper boards.
Fraser Companies	Edmundston, N.B.	Edmundston	Groundwood, bleached and unbleached sulphite pulp. Building papers. Paper boards.
Fraser Companies	Edmundston, N.B.	Newcastle	Unbleached kraft pulp.
Irving Pulp and Paper	Lancaster, N.B.	Lancaster	Unbleached sulphite pulp, kraft.
New Brunswick International Paper Co.	Montreal	Dalhousie	Groundwood and unbleached sulphite pulp. Newsprint. Mill wrapper and core paper
Restigouche Co.	Edmundston, N.B.	Atholville	Bleached sulphite pulp. Chemical screenings.
St. George Pulp & Paper Co.	St. George, N.B.	St. George	Groundwood pulp.
Trafalgar Mills	South Nelson	South Nelson	Building boards.
Nova Scotia			
Halifax Power and Pulp Co.	Sheet Harbour, N.S.	Sheet Harbour	Groundwood pulp.
Le Have Pulp Co.	New Germany, N.S.	New Germany	Groundwood pulp.
Mersey Paper Co.	Liverpool, N.S.	Brooklyn	Groundwood and unbleached sulphite pulp. Newsprint.
Minas Basin Pulp and Power Co.	Hantsport, N.S.	Hantsport	Groundwood pulp. Building papers. Paper boards.
Newfoundland			
Anglo-Newfoundland Development Co.	Grand Falls, Nfld.	Grand Falls	Groundwood and unbleached sulphite pulp. Newsprint.
Bowater's Newfoundland Pulp and Paper Mills	Corner Brook, Nfld.	Corner Brook	Groundwood and unbleached sulphite pulp. Newsprint.

Source: Dominion Bureau of Statistics; Canadian Pulp & Paper Association.



MAKING PULP and paper is a task of precision. Intricate instruments both measure and control the quantity and quality of output.

Dissolving Pulp Mills Hunt Domestic, Foreign Markets

(Continued from page 73)

sent only 1.5% of total domestic production.

Largest single factor is the fantastic growth of the dissolving pulp industry in the U. S. which since 1946 has almost trebled.

Today the capacity in that country is almost 1.1 million tons compared with 346,000 tons in 1946. In the last three years alone, capacity has increased from 756,000 tons to the present level.

Prior to 1953, the pattern of Canadian dissolving pulp exports reflected closely the pattern of U. S. chemical cellulose consumption.

In 1953-54, U. S. consumption slumped as did Canadian exports. In the following year, however, U. S. consumption climbed to a new high of an estimated 1,141,000 tons while Canadian exports continued on the down grade. The reason: the vast increase in U. S. capacity.

Most of the recently established U. S. dissolving mills have followed their biggest market, the textile industry to the South. There, from the pulp and paper point of view, labor is relatively cheap and wood grows quickly.

As a result, U. S. dissolving pulp costs are lower than Canadian and in addition the U. S. mills are located much closer to a large portion of their market.

60% Canada Costs

It was estimated recently that cost of wood to the mill in the Southern U. S. is about 60% of the cost to a Canadian mill.

In this rosy picture, however, there are some gathering clouds. Costs are rising rapidly. Minimum wage laws recently introduced are increasing labor costs as is competition for the labor supply in general as industrialization of the South continues.

Then too many pulp and paper operations other than dissolving pulp have been established with the result that competition for wood is becoming keener.

In short, Canadian industry officials feel that Southern U. S. operators may well be on the way to becoming — to some extent at least — the victims of the South's recently found prosperity.

The second major problem is that the textile industry is the largest single outlet for the production of the dissolving pulp. Both viscose and acetate — loosely referred to as rayon — use wood cellulose as the basic raw material.

In the United States last year, the textile industry took an estimated 55% of total chemical cellulose consumed with Cellophane absorbing 16% and other cellulosic products the balance.

In Canada it is estimated consumption last year divided: 57% textiles, 20% Cellophane and 23% other cellulosics.

The generally poor condition of the textile industry as a whole has of course been felt by acetate and viscose producers.

Inter-fibre Battle

In addition these two have been in the middle of an inter-fibre battle raging within the textile industry itself.

The chief opponent has been cotton, in whose price class rayon falls. To a lesser degree, viscose and acetate rayons have had battle with other non-cellulosic man made fibres.

In recent years, high tenacity rayon has been able to take away a sizeable portion of the tire cord market from cotton.

The importance of this market to the dissolving pulp mills may be seen from the fact that high tenacity rayon consumption in the U. S. last year represented some 37% of chemical cellulose consumed by the textile industry. At present nylon is looming on the horizon as a potential threat to high tenacity rayon.

Use of nylon tire cord, however (except in special tires), is still small relatively, although it has been growing rapidly.

In the industrial and to a lesser extent the household textile field, where at all suitable, viscose and acetate appear to have carved out relatively secure territories for themselves. Rugs and certain types of industrial belting are among the examples.

In the apparel field, however, there's a wide divergence of opinion. Here rayon in the past has made none too good a name for itself with the buying public, certainly as far as pure rayon fabric is concerned.

Currently the big drive is in the field of staple or rayon filament chopped up into little pieces so that it can be blended with cotton and other fibres.

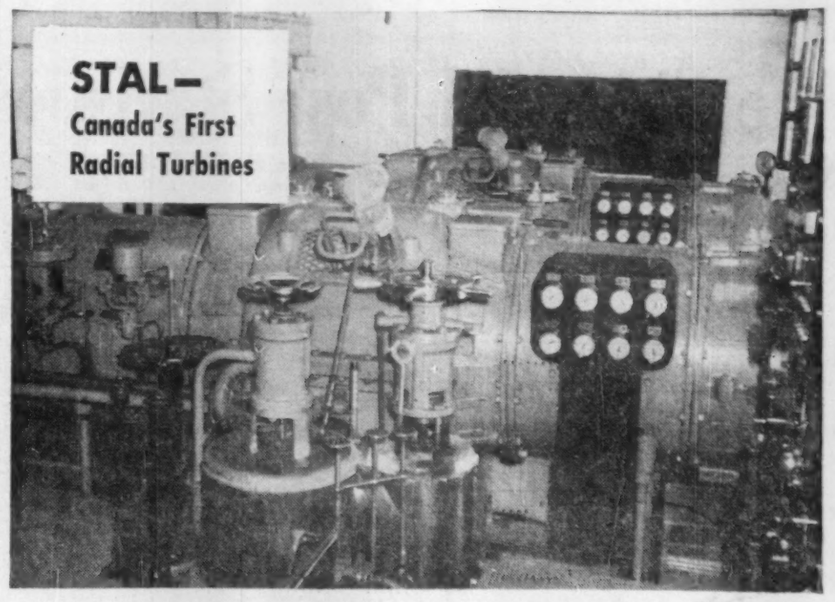
Rayon producers claim that they have vastly improved their product and that staple blended with other fibres reduces fabric cost and results in a superior fabric.

Cotton men, on the other hand, maintain that rayon doesn't add any qualities when combined with cotton and the cost advantage of doing so is small or non-existent. Some even go so far as to state that it's only cotton's superior qualities that carry the rayon content of the blend.

Brightest prospects for dissolving pulp appears to lie in Cellophane and other non-textile uses for chemical cellulose.

As a packaging material regenerated cellulose film (commonly called Cellophane though this is actually a trade mark of the Du Pont Co.) appears to have a very bright future.

In Canada for example, it is estimated the market for this material will double in the next 15 to 20 years.



Canada's 1st radial turbines! Two 2000-kw STAL turbo-generators at Strathcona Paper Co. Ltd.

STAL turbines give Strathcona Paper

"more power per square foot than any other mill in Canada"

"So far as is known, the Strathcona plant has more power per sq. ft. than any other mill in Canada of comparable size," reports Mr. Louis Chaves, Electrical Superintendent to the Strathcona Paper Co. Ltd. in *Modern Power and Engineering* (May), concerning their two new STAL back pressure turbines.

STAL double-rotation radial flow turbines are renowned all over the world for their performance and engineering. This installation, the first use of radial turbines in Canada, is another example of their acclaim. Swedish General Electric is proud to have supplied this equipment and supervised its installation.

For further information about the Strathcona installation and STAL turbines, write Swedish General Electric Ltd., 715 Victoria Square, Montreal, P.Q.

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(for the Canadian electronics, instrument, and communications industries)

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Take advantage of Indiana's 48 years of experience, research leadership, and specialized engineering "know-how" for help in your design problems.

Or, see the world's most complete line of Alnico permanent magnets at the Canadian I.R.E. Convention and Exposition, Toronto, Ontario, October 1-2-3. Visit us at Booth No. 446.

The Indiana Steel Products Company of Canada, Ltd.
KITCHENER, ONTARIO
PERMANENT MAGNETS . . CORROSION AND HEAT-RESISTANT ALLOY CASTINGS

The Financial Post Statistical Record of Major Pulp and Paper Companies

Newsprint Group

Company	Year	Wood Resources Cords or Sq. Miles	Mill Capacity Annual Tons	Funded Debt $	Net Earn. $	Deprec. $	Times Int. Earned After Deprec. No.	Income Taxes $	Net Profit $	Earnings per Share Pref. $	Earnings per Share Com. $	Dividends Paid or Pay. Pref. $	Dividends Paid or Pay. Com. $	Surplus for Year $	Working Capital $	DIRECTORS
ABITIBI POWER & PAPER§	†1955	25,000	760,402	29,060,000	36,836,977	‡7,132,899	26.11	14,570,000	13,936,026	25.34	3.20	1.12½	1.35	7,698,234	40,807,946	D. W. Ambridge, pres. and gen. mgr.; W. H. Smith, vice-pres.; Allan Graydon, C. L. Gundy, J. S. D. Tory, E. W. Bickle, Toronto; R. H. Reid, London, Ont.; H. J. Carmichael, St. Catharines; T. R. McLagan, Hon. Edouard Asselin, Montreal; J. P. Ripley, New York. Vice-pres.'s—R. J. Askin, C. B. Davis, A. P. Jewett, Paul E. Roberts. Vice-pres. & treas.—W. S. Rothwell. Sec.—L. B. Popham.
	†1954	sq. mi.	.....	41,331,700	31,298,601	‡6,793,696	17.29	12,403,000	10,625,901	17.65	2.49	10.46⅞	1.20	4,961,385	39,099,197	
†Consolidated. ‡In addition, co. paid 87½c per sh. on old $1.50 pref.																
ANGLO-CANADIAN PULP & PAPER§ ...	†1955	9,558	233,000	14,000,000	14,628,587	‡3,663,617	22.36	5,058,509	*5,434,388	33.96	3.94	2.80	2.00	2,457,846	18,943,987	R. C. McMichael, chm., Montreal; E. M. Little, pres.; W. E. Soles, vice-pres. & gen. mgr.; H. D. Ruthman, sec.; James O'Halloran; Quebec, P.Q.; W. H. Howard, Westmount, P.Q.; The Viscount Rothermere, C. H. King, A. S. Fuller, P. G. Walker, London, Eng.; James Cooke, Woddingham, Eng.; J. F. E. Coope, Kingswood, Eng.; E. L. Goodall, Port Arthur, Ont.; T. R. Moore, Grand Falls, Nfld. Treas.—C. H. Smith.
	†1954	sq. mi.	.....	8,225,000	13,280,330	‡3,516,917	37.60	4,850,164	*4,651,474	29.07	3.32	2.80	2.00	1,675,582	15,743,871	
†Consolidated. *Not including profit on disposal of assets amounting to $1,681 in 1955, $17,311 in 1954.																
ANGLO-NEWFOUNDLAND DEV. C.•	†1955	7,456	230,000	.....	9,994,876	‡2,305,937	....	3,056,800	4,632,139	....	0.84	....	0.60	1,333,090	21,373,554	W. H. Howard, chm., Montreal; E. M. Little, pres., Quebec, P.Q.; Philip Gruchy, first vice-pres.; J. S. Goodyear, vice-pres. and sec.-treas.; T. R. Moore, gen. mgr.; Grand Falls, Nfld.; R. C. McMichael, B. C. Gardner, Montreal; The Viscount Rothermere, A. S. Fuller, The Earl of Cromer, London, Eng.; E. A. Sursham, Markyate, Herts, Eng.; Grenville Beckett, Redhill, Surrey, Eng.
	†1954	sq. mi.	.....	.....	8,264,610	‡2,373,694	....	2,259,400	3,631,516	....	0.66	....	0.60	332,467	19,519,167	
†Consolidated statements.																
BOWATER CORP. OF N. AMER.§•	♦*†1955	.....	.....	†52,839,068	22,579,253	6,195,032	5.96	6,787,607	6,538,935	18.68	....	....	....	.....	43,764,899	Sir Eric V. Bowater, pres., London, Eng.; G. S. Currie, vice-pres., Montreal; Sir John H. Keeling, K. N. Linforth, W. J. Kirwan-Taylor, England; H. M. S. Lewin, Corner Brook, Nfld.; Earle Spafford, Montreal; Alex. Brackenridge, South Orange, N.J.; A. B. Meyer, Greenwich, Conn. Sec. and treasurer, Sam Mann, Montreal.
	♦*1954	.....	.....	†54,180,454	17,043,035	4,434,771	5.95	4,759,078	5,329,904	15.23	....	....	....	.....	29,681,489	
♦Consolidated. *From pro-forma statement, after giving effect to increase in capital and issue of pref. stock †of subsidiaries. ‡12 mos. ended Dec. 31. •15 mos. ended Dec. 31.																
CONSOLIDATED PAPER§	1955	17,641	791,868	.....	29,467,046	‡3,781,071	1,629.30	12,000,000	13,747,019	....	*2.68	....	†	6,048,247	54,513,795	L. J. Belnap, chm.; G. M. Hobart, pres.; Francois Faure, N. J. Dawes, W. H. Howard, G. M. Todd, C. F. Sise, Hon. C. A. Dunning, H. H. Lank, W. S. Kirkpatrick; Montreal; H. D. L. Gordon, Toronto. Vice-pres. & compt.—George Henderson. Vice-pres.'s—Richard Collins, J. A. Michaud. Sec.—D. J. Glen. Treas.—D. L. Adams.
	1954	sq. mi.	.....	.....	30,177,062	‡5,156,405	118.08	13,000,000	11,848,327	....	4.62	....	1.50+0.75	6,074,416	52,105,016	
*On new stock after 2-for-1 split Apr. 28, 1955. †Paid 75c+50c per new sh., and 50c per old sh																
CROWN ZELLERBACH CANADA	▲1955	‡8,000	184,000	14,014,000	21,756,000	♦4,377,000	25.58	6,852,000	9,886,000	....	1.41	....	....	.....	38,759,000	F. N. Youngman, chm.; P. T. Sinclair, pres.; R. H. R. Young, exec. vice-pres.; O. D. Hallin, vice-pres.; R. D. Baker, P. E. Cooper, R. J. Filberg, R. T. Hager, Hon. E. W. Hamber, M. D. Hamilton, O. F. Lundell, W. E. Wintemute, J. A. Young; Vancouver. Vice-pres.'s—E. W. Campbell, R. J. Schadt, F. A. Scott. Treas. & compt.—G. J. C. Hodson. Sec.—T. A. A. Fraser.
▲From pro forma statement Dec. 31, 1955, including Crown Zellerbach Canada Ltd. and its subsidiaries, Canadian Western Lumber Co. Ltd. and its subsidiaries and Elk Falls Co. Ltd. and its subsidiaries. ‡Millions of board feet.																
DONNACONA PAPER•▲	1955	1,721	105,000	4,745,000	4,581,030	♦963,441	20.52	1,615,951	1,822,659	....	4.80	....	1.00	1,443,127	7,144,819	L. W. Michael, pres. & treas.; L. A. Palmer, vice-pres. & gen. mgr.; Donnacona, P.Q.; E. Howard Smith, vice-pres.; Hon. G. B. Foster, H. R. Crabtree, E. K. Robinson; Montreal; J. Edouard Simard, Sorel, P.Q.; R. P. Kernan, Quebec, P.Q.; Aubrey Crabtree, Edmundston, N.B.; A. J. Philip, Windsor Mills, P.Q. Sec.—P. L. Fitzgerald.
	1954	sq. mi.	.....	4,940,000	3,714,889	♦1,054,406	14.53	1,230,684	1,243,995	....	3.28	....	1.00	864,463	6,010,693	
Note—97% of outstanding shares owned by Howard Smith Paper Mills Ltd.																
DONOHUE BROS.▲	1955	557	65,700	3,523,300	2,126,083	♦312,177	11.27	780,624	872,373	....	2.91	....	1.20+0.25	437,373	4,412,515	Chas. Donohue, chm.; G. T. Donohue, pres.; Mark Donohue, exec. vice-pres. & gen. mgr.; P. M. A. Simard, vice-pres. & treas.; A. E. Beauvais, vice-pres. & sec.; L. J. A. Amyot, Quebec, P.Q.; J. D. Coffin, New York.
	1954	sq. mi.	.....	2,810,000	2,045,856	♦337,209	11.79	772,099	791,590	....	2.64	....	1.20+0.20	371,590	4,025,238	
GREAT LAKES PAPER•	‡1955	6,650	155,000	9,316,000	7,850,538	♦1,059,257	65.54	3,200,000	*3,450,118	†34.50	2.78	†1.20	1.60	1,410,118	16,158,748	P. M. Fox, chm., Montreal; C. J. Warwick Fox, pres. & gen. mgr., Fort William, Ont.; Ross Clarkson, J. R. Timmins, Montreal; W. C. Cochrane, R. G. Meech, Col. M. C. G. Meighen, Toronto; Hon. Ray Lawson, Oakville, Ont.; C. B. McDowell, Akron, Ohio; C. P. Slane, Peoria, Ill. Vice-pres. & sec.-treas.—K. A. Miners. Vice-pres.—J. H. Merrill.
	‡1954	sq. mi.	.....	2,721,000	7,305,523	♦1,103,204	54.49	2,972,057	*3,116,444	†31.16	2.43	†1.20	1.60	995,050	8,863,433	
‡Consolidated. *Does not include profit on disposal of fixed assets amounting to $43,067 in 1955, $26,567 in 1954 †Cl. B only; cl. A redeemed June 30, 1954; dividend of $1.25 per cl. A sh. paid in 1954.																
JAMES MACLAREN CO.▲	1955	2,600	105,000	.....	5,719,621	369,688	....	2,315,400	3,034,533	....	....	....	....	.....	.....	A. Barnet Maclaren, pres., Ottawa; A. Roy MacLaren, vice-pres.; J. W. Thomson, sec.; Buckingham, P.Q.; C. H. MacLaren, Ottawa.
	1954	sq. mi.	.....	.....	4,921,197	517,769	....	2,024,900	2,378,528	....	....	....	....	.....	.....	
Wholly owned by Maclaren Power & Paper Co.																
MERSEY PAPER	*1955	900	138,000	.....	♦6,743,238	570,215	....	2,828,274	3,263,024	‡	16.07	‡1.25	†3.00	2,590,791	2,761,622	Sir Eric Bowater, chm., London, Eng.; B. J. Waters, pres. & gen. mgr.; J. H. M. Jones and R. L. Seaborne, vice-pres.'s; J. A. Parker, sec.-treas., Liverpool, N.S.; G. S. Currie, Montreal, P.Q.; H. M. S. Lewin, Corner Brook, Nfld.; A. B. Meyer, Greenwich, Conn.; K. N. Linforth, London, Eng.
	*1954	sq. mi.	.....	400,000	♦6,508,918	556,598	....	2,869,489	3,058,331	49.25	13.85	5.00	1.00	2,547,012	6,602,555	
*Consolidated. ♦After depletion. ‡Pref. redeemed Apr. 1, 1955. †In addition, stock divd. of one 5% pref. sh. for each 11 1/9 com. shs. pd. Feb. 1, 1956.																
MINNESOTA & ONTARIO PAPER§	†1955	10,000	216,000	14,000,000	17,543,098	♦3,062,555	31.56	6,945,000	7,076,693	....	5.50	....	2.40	3,859,883	24,978,466	J. B. Faegre, chm.; Robert Faegre, pres.; Minneapolis; T. L. Daniels, St. Paul; C. T. Jaffray, H. W. Sweatt, D. F. Bull, T. M. Crosby, Minneapolis; Serge Semenenko, Boston; C. S. Garland, Baltimore, Md.; C. G. Cockshutt, Brantford, Ont.; R. S. Waldie, Toronto. Senior vice-pres.—C. T. McMurray. Vice-pres.'s—C. Larsen, P. A. Mahony. Treas.—E. A. Johnston. Sec.—A. T. Morrison. Compt.—D. K. Kaslow.
	*†1954	sq. mi.	.....	5,000,000	15,282,303	♦2,966,133	51.32	6,006,600	6,067,570	....	4.72	....	2.10	3,365,449	20,606,464	
†Consolidated. *Not including new financing in March, 1955.																
POWELL RIVER§	‡1955	740	393,000	.....	28,593,942	♦4,946,591	....	11,555,800	†12,197,018	....	2.90	....	1.15+0.65	4,637,018	17,161,328	H. S. Foley, chm.; M. J. Foley, pres.; G. W. O'Brien, vice-pres.; J. H. Lawson*, sec.; A. H. Williamson, W. S. Brooks, Col. Hon. C. Wallace, Maj.-Gen. H. F. G. Letson; Vancouver; Conley Brooks, Anson Brooks, Minneapolis, Minn.; R. H. Scanlon, San Francisco; J. S. Sample, Chicago. Vice-pres.'s—I. H. Andrews, J. E. Leirsch, J. A. Kyles, R. M. Cooper, W. C. R. Jones. Compt.—K. B. Finn. *Deceased.
	‡1954	sq. mi.	.....	.....	27,102,560	♦4,497,038	....	11,325,000	†11,258,311	....	2.68	....	1.00+0.60	4,038,311	15,983,058	
‡Consolidated. †Including profit on sale of fixed assets and securities amounting to $105,467 in 1955, $132,428 in 1954.																
PRICE BROS. & CO.§	‡1955	7,696	470,000	6,164,000	19,931,463	♦2,915,000	90.05	7,650,000	9,172,873	183.46	4.09	4.00	2.00	4590,017	44,072,702	H. J. Symington, chm., Montreal; A. C. Price, pres., Quebec, P.Q.; A. A. Aitken, vice-pres.; J. D. Johnson, W. A. Arbuckle, A. S. Gordon; Montreal; M. R. Kane, A. C. Picard, A. C. M. Thomson, Guy Hudon, Quebec, P.Q.; Sir Keith Price, London, Eng. Exec. vice-pres.—Hector Cimon. Vice-pres. i/c woodlands—M. V. Cain. Vice-pres. & treas.—P. W. Sims. Sec.—Fabre Surveyer.
	‡1954	sq. mi.	.....	6,390,500	18,350,246	♦2,983,000	75.10	6,925,000	8,075,890	161.52	3.59	4.00	2.00	3,493,034	39,123,279	
‡Consolidated.																
ST. LAWRENCE CORP.§	†1955	9,091	380,700	27,813,476	19,457,228	♦4,113,146	9.32	6,569,625	7,062,842	....	6.40	....	2.00	4,857,412	21,433,997	M. W. McCutcheon, chm., Toronto; P. M. Fox, pres.; N. A. Timmins, Jr., Vice-pres.; Hon. Edouard Asselin, A. K. Cameron, A. H. Campbell, J. E. L. Duquet, H. C. Flood, Hon. G. B. Foster, J. I. Rankin; Montreal; J. A. McDougald, E. P. Taylor, Col. W. E. Phillips, Toronto; Hugh Mackay, Rothesay, NB.; D. J. Sails, Sherbrooke, P.Q.; Nathan Pitcairn, Philadelphia, Pa.; Arthur Ross, New York. Vice-pres. & gen. mgr.—S. E. Williams. Vice-pres.—J. W. Fries. Compt. & treas.—L. A. Tucker. Sec.—J. E. Martin
	†1954	sq. mi.	.....	29,238,212	16,246,004	♦4,156,984	7.07	4,494,838	4,451,038	....	4.04	....	2.00	2,245,608	17,220,224	
†Consolidated statement.																

♦Including depletion. dDeficit. •Also produces sulphite pulp. §Also produces pulp, kraft or other wood products. ▲Also produces groundwood pulp. *Also produces paper & misc. products.

Fine and Specialty Paper Group

Company	Year	Wood Resources Cords or Sq. Miles	Mill Capacity Annual Tons	Funded Debt $	Net Earn. $	Deprec. $	Times Int. Earned After Deprec. No.	Income Taxes $	Net Profit $	Earnings per Share Pref. $	Earnings per Share Com. $	Dividends Paid or Pay. Pref. $	Dividends Paid or Pay. Com. $	Surplus for Year $	Working Capital $	DIRECTORS
EDDY PAPER CO.§	†1955	5,800	155,000	‡19,375,000	6,205,525	♦2,424,083	6.16	1,519,090	1,538,916	7.69	6.69	1.00	nil	1,388,917	13,551,918	W. Garfield Weston, chm.; R. A. Irwin, pres. & man. dir., London, Ont.; W. D. Moffatt, R. F. Caldwell, vice-pres.'s, Ottawa; J. F. Taylor, vice-pres.; B. W. Power, compt.; C. L. Gundy; Toronto; D. G. Currie, Ottawa; J. A. Craig, Victoria, B.C. Vice-pres.—J. W. Paterson. Sec.—C. G. Banghart.
	†1954	sq. mi.	.....	‡10,741,500	4,858,588	♦1,674,616	7.47	1,344,549	1,321,652	6.61	5.61	1.00	nil	1,121,652	6,406,332	
†Consolidated. ‡Funded debt of subsidiaries.																
ROLLAND PAPER	1955	.....	33,000	*1,150,000	1,454,639	314,622	23.79	512,000	580,095	34.12	•8.46	4.25	▲1.00+0.40	423,844	2,501,652	L. G. Rolland, pres. & gen. mgr., St. Jerome, P.Q.; J. A. Weldon, vice-pres. (finance); R. H. Eccleston, vice-pres. & sales dir.; Montreal; Marc Rolland, vice-pres. & mills mgr., St. Jerome, P.Q.; Olivier Rolland, Albert Rolland, Alderic Laurendeau, Montreal; Hugh Mackay, Rothesay, N.B.; J. Y. Murdoch, K. S. Maclachlan; Toronto. Treas.—H. A. Leblanc. Sec.—J. P. Lefebvre.
	1954	.....	.....	1,225,000	1,524,616	295,171	24.42	615,000	564,286	33.19	8.20	4.25	1.00+0.35	411,035	2,466,456	
*In Jan., 1956, issue made of $5,500,000 new 1st mtge. bonds previous issue retired ▲Old common; following stock split approved Dec. 19, 1955, earnings after partic. equal to $2.95 ($2.87) per cl. A sh., and $2.55 ($2.47) per cl. B sh.).																
HOWARD SMITH PAPER§	†1955	5,000	‡310,000	17,495,000	18,101,426	♦5,349,774	18.69	5,850,000	6,146,659	38.42	3.34	2.00	1.00+*0.45	3,299,672	22,335,271	E. Howard Smith, chm. & pres.; E. K. Robinson, exec. vice-pres., Montreal; A. J. Philip, vice-pres. & gen. mgr., Windsor Mills, P.Q.; G. H. Tomlinson, vice-pres.; G. W. Bourke, deGaspé Beaubien, W. A. Arbuckle, Howard Murray, J. D. Johnson, Col. R. D. Harkness, W. H. Howard, H. Roy Crabtree, D. S. Abbott, Montreal; W. E. Phillips, Toronto. Vice-pres.—W. H. Aird. Sec. & treas.—K. G. Pendock. Controller—R. J. Leslie.
	†1954	sq. mi.	.....	19,021,000	15,571,034	♦4,680,025	15.43	5,110,000	5,020,256	31.38	2.70	2.00	1.00	2,957,506	21,972,824	
†Consolidated. ‡Including Donnacona Paper Co. Ltd. *Including 20c paid out of 1954 earnings.																
WESTMINSTER PAPER▲	*1955	.....	30,000	.....	1,650,435	314,445	....	565,000	761,759	A 33.37	B 1.57	A 0.50	B 0.70+0.10	370,140	2,384,199	J. J. Herb, chm., Bellingham, Wash.; E. M. Herb, pres. & man. dir.; J. Ashby, vice-pres.; Vancouver, B.C.; F. F. Foote, sec.-treas.; J. G. Robson; New Westminster; A. D. Lauder, C. Bentall, Vancouver; A. F. Armstrong, N. W. Markus, Jr.
	†1954	.....	.....	†1,240,000	1,786,169	345,888	27.00	642,000	741,574	20.20	1.55	0.50	0.65+0.12½	409,728	2,147,886	
*11 mos. ended Dec. 31. †Year ended Jan. 31.																

‡Also mfrs. pulp products and by-products. ♦Including depletion. ▲Also produces groundwood and sulphite pulp. dDeficit.

Pulp Group

Company	Year	Wood Resources Cords or Sq. Miles	Mill Capacity Annual Tons	Funded Debt $	Net Earn. $	Deprec. $	Times Int. Earned After Deprec. No.	Income Taxes $	Net Profit $	Earnings per Share Pref. $	Earnings per Share Com. $	Dividends Paid or Pay. Pref. $	Dividends Paid or Pay. Com. $	Surplus for Year $	Working Capital $	DIRECTORS
BATHURST POWER & PAPER	▲1955	2,700	*182,000	8,818,500	7,691,294	♦1,339,864	14.68	2,744,000	3,154,819	A ‡7.98	B †4.78	A 3.00+0.50	B 2.00+1.00	1,267,319	12,137,326	R. L. Weldon, pres.; R. H. Christian, exec. vice-pres.; P. A. Thomson, vice-pres.; Montreal; J. G. Chalmers, Bathurst, N.B.; Joseph A. Simard, J. B. Woodyatt, Montreal; Hon. G. P. Burchill, Nelson, N.B.; E. M. Little, Quebec, P.Q.; E. Gordon McMillan, Toronto, Ont. Sec.—E. S. Kirkland. Treas.—S. C. Hollingshead.
	▲1954	sq. mi.	.....	9,229,000	7,266,602	♦1,274,195	13.93	2,580,000	2,962,283	‡7.41	†4.19	2.00+1.00	1.00	1,437,283	12,635,447	
▲Consolidated. *All products. ‡Before (†after) participation; after partic. cl. A earned $4.00 (x.) both years.																
FRASER COS.▲	†1955	5,531	244,500	3,850,000	14,481,940	♦3,418,655	90.31	5,230,000	5,710,785	....	2.57	....	1.00+0.50	2,371,632	15,036,348	Aubrey Crabtree, chm., pres. & gen. mgr.; L. M. Sherwood, vice-pres. & controller; Edmundston, N.B.; A. H. Campbell, Hon. F. P. Brais, C. M. Matheson, H. Roy Crabtree, H. P. Thornhill, Montreal; Hon. D. L. MacLaren, Ralph B. Brenan, Saint John, N.B.; R. A. Jodrey, Hantsport, N.S. Sec.—G. G. Gillies. Treas.—H. H. Henderson.
	†1954	sq. mi.	.....	4,200,000	12,751,115	♦3,115,694	73.41	4,636,000	4,868,171	•	2.16	3.76	1.00	2,588,523	13,798,549	
†Consolidated. •Redeemed Oct. 15, 1954.																
MINAS BASIN PULP & POWER♦†	*1954	484	35,000	1,953,500	†756,915	190,570	6.33	122,181	154,688	....	9.10	....	2.00+1.00	103,688	2,330,968	D. W. Murray, chm.; R. A. Jodrey, pres.; J. J. Jodrey, vice-pres. & man. dir.; G. H. Nichols, treas.; L. G. Bishop, asst. sec. & asst. treas.; B. R. Alexander; Hantsport, N.S.; G. A. Chase, L. B. Chase, Port Williams, N.S.; F. M. Covert, F. C. Manning, R. W. Harris, Halifax, N.S.; K. L. Crowell, Bridgetown, N.S.; C. G. Hawkins, Milford, N.S.; C. P. Wyman, Portneuf, P.Q.; J. B. Hennigar, Sheffield Mills, N.S. Sec.—G. A. Bent
	1953	sq. mi.	.....	2,000,000	†508,114	202,186	3.32	19,618	194,172	....	11.42	....	2.00+1.00	143,172	2,236,479	
†After interest on loans, notes, etc. *Latest available.																

♦Including depletion. ♦♦Also produces paperboard. ▲Also produces board and specialty papers.

Miscellaneous Group

Company	Year	Wood Resources Cords or Sq. Miles	Mill Capacity Annual Tons	Funded Debt $	Net Earn. $	Deprec. $	Times Int. Earned After Deprec. No.	Income Taxes $	Net Profit $	Earnings per Share Pref. $	Earnings per Share Com. $	Dividends Paid or Pay. Pref. $	Dividends Paid or Pay. Com. $	Surplus for Year $	Working Capital $	DIRECTORS
BARBER-ELLIS OF CANADA	1955	.....	.....	.....	652,082	114,594	....	216,323	316,165	263.47	7.09	3.50	3.20+0.80	135,965	1,452,349	E. H. Ellis, pres., Toronto; C. G. Ellis, chm. & vice-pres., Brantford, Ont.; K. W. Murphy, gen. mgr., Toronto; J. S. Ellis, treas., Montreal; J. W. Westaway, T. A. Thornton, Toronto; A. E. Nelson, Winnipeg; Lt.-Col. Vernon Scott, Vancouver; E. W. Thompson, Brantford. Sec.—C. F. Tress.
	1954	.....	.....	.....	546,482	102,616	....	198,208	240,658	200.55	5.37	3.50	3.20	95,658	1,368,701	
BUILDING PRODUCTS	1955	.....	.....	.....	3,143,274	508,991	....	1,035,361	†1,602,066	....	3.31	....	1.80	731,975	6,740,780	W. R. McNeil, chm.; L. S. Odell, vice-chm.; L. F. Long, pres. & man. dir.; J. D. Johnson, G. W. Huggett, J. A. Eccles, Montreal; H. R. Tudhope, Toronto; Joseph Harris, Winnipeg; P. R. Allen, East Walpole, Mass. Vice-pres.—C. E. Turner. Sec.-treas.—J. E. Mitcham.
	1954	.....	.....	.....	3,542,669	654,949	....	1,300,000	†1,587,007	....	3.28	....	1.80	716,916	6,238,935	
†Including prof. on sale of fixed assets and investments of $4,577 in 1955, $4,156 in 1954.																
CANADIAN WALLPAPER	*1956	.....	.....	140,000	465,979	143,085	....	90,000	225,294	....	A & B 1.74	....	A & B 0.40	173,596	2,329,456	Arnold Ashton, pres., Toronto; L. K. Redman, vice-pres., Manchester, Eng.; R. J. Boxer, T. A. G. Staunton, R. R. Sparling, D. A. Mackenzie; Toronto; A. Jackson, Alfred Whittle, Manchester, Eng.; G. H. Walmsley, Rochdale, Lancs., Eng.; J. Watson, Darwen, Lancs., Eng.; I. C. Sanderson. Sec.-treas.—John Prescott.
	*1955	.....	.....	180,000	†202,837	135,056	....	‡47,534	†229,559	....	d2.32	....	nil	†299,559	1,969,944	
*Year ended April 30. †Loss or deficit. ‡Credit.																
HENDERSHOT PAPER PROD.	1955	.....	.....	.....	345,844	35,370	....	141,174	169,300	67.72	5.23	5.00	1.00+0.25	119,300	248,221	T. R. Harrison, pres., Toronto; J. C. Colclough, vice-pres. & gen. mgr.; G. W. Hendershot, Argue Martin, S. S. DuMoulin, Hamilton, Ont. Sec.-treas.—E. M. McArdle.
	1954	.....	.....	.....	276,330	36,621	....	112,480	127,229	50.89	3.82	5.00	1.00+0.25	77,229	142,502	
HINDE & DAUCH PAPER	‡*1955	.....	.....	3,500,000	4,954,605	1,131,816	30.43	1,740,471	1,956,704	....	5.44	....	1.80	1,308,704	7,160,198	Sidney Frohman, chm.; C. E. Frohman, vice-chm.; Sandusky, Ohio; W. H. Palm, pres. & gen. mgr.; T. E. Lloyd, vice-pres. & sec.; M. H. McArthur, vice-pres. sales; R. L. Warren; Toronto; D. L. Luke, Jr., J. D. Cowan, D. L. Luke, III, New York. Treas.—R. S. Kellow.
	‡•1954	.....	.....	3,800,000	3,750,494	679,853	41.53	1,493,146	1,503,560	....	†4.77	....	1.40	1,062,560	5,617,030	
‡Consolidated. *Year ended Oct. 31. •Ten months ended Oct. 31. †Based on No. of shs. o/s as calculated from dividends paid.																
SIDNEY ROOFING & PAPER	1955	.....	.....	5,000,000	1,771,552	561,747	9.80	561,090	519,683	10.39	4.75	0.90	nil	474,683	4,381,937	W. Garfield Weston, chm.; R. W. Mayhew, vice-chm.; J. A. Craig, pres. & gen. mgr.; H. E. Brown, sec. & treas.; R. F. Caldwell, R. A. Irwin, A. H. Williamson.
	1954	.....	.....	991,500	1,196,337	330,966	23.24	411,549	416,578	8.33	3.72	0.90	nil	371,578	1,582,850	
SOMERVILLE	1955	.....	.....	2,720,806	1,771,463	420,509	8.90	580,600	618,491	15.46	142.15	2.80	*60.325	291,551	2,096,015	W. Garfield Weston, chm.; R. A. Irwin, pres. & gen. mgr.; F. C. Lennox, vice-pres., sales; A. G. Shillington, vice-pres., prod.; F. B. Campbell, sec.-treas & controller; J. A. Chambers, H. J. Coon.
	1954	.....	.....	2,823,286	1,263,586	364,216	5.75	271,014	471,818	11.80	100.99	2.80	nil	359,818	2,848,931	
*Special.																
J. C. WILSON	1955	.....	.....	.....	75,068	134,152	....	15,767	•81,041	....	d0.49	....	0.12	•100,931	1,218,618	F. Howard Wilson, pres.; H. G. Lafleur vice-pres.; J. B. Morgan, Dudley Dawson, J. Pembroke; Montreal. Sec.-treas.—R. D. Linton.
	1954	.....	.....	.....	222,780	132,201	....	35,793	48,430	....	0.29	....	0.17½	19,424	890,252	
•Loss or deficit.																
HENDERSHOT PAPER PROD.	1955	.....	.....	.....	345,844	35,370	....	141,174	169,300	67.72	5.23	5.00	1.00+0.25	119,300	248,221	T. R. Harrison, pres., Toronto; J. C. Colclough, vice-pres. & gen. mgr.; G. W. Hendershot, Argue Martin, S. S. DuMoulin, Hamilton, Ont. Sec.-treas.—E. M. McArdle.
	1954	.....	.....	.....	276,330	36,621	....	112,480	127,229	50.89	3.82	5.00	1.00+0.25	77,229	142,502	

Paper Products Outlook Bright

If one took a trip back through time and space to Lachute, Que., 1805, he would see the first pulp and paper mill in Canada.

From his conception of the giant industry today, he probably might feel the same as an earthman visiting the outer planets for the first time in a space ship.

Primitive it was by today's standards. The paper was produced by hand, generally from cotton or linen rags. The output of the first mill included items familiar today such as wrapping paper, paperboard and blotting paper, supplying only the nearby local market.

The industry has evolved slowly with the tempo quickening to meet the mounting demands of growing population and economies. An important segment of the pulp and paper industry—although not always the most recognized—is the host of products produced aside from newsprint and market pulp.

These products include book, writing and groundwood papers, paperboard, container board and boxboard, wrapping papers, tissue and sanitary papers.

The development of these products has largely rested on domestic markets because unlike newsprint and market pulp they usually, instead of rarely, encounter tariff barriers.

Can't Reach Markets

Mills making these products have not been able to reach the large volume markets of the world, particularly the U. S., except very rarely when demand was exceptionally high and customers were preposed to buy and pay local tariff charges. (See separate story on fine paper.)

The industry's main difficulty is substantial cost disabilities. Canadian mills generally can't get the advantage of the long run and mass production methods.

Canadian manufacturers have had to equip themselves to turn out a large number of different grades, weights and colors in short runs and to ship them at higher transportation costs in east-west movements to supply the Canadian markets.

In this range, the industry has operated with success in lowering costs and increasing efficiency.

Here's the long-term outlook, as outlined in the Canadian Pulp and Paper Association brief to the Gordon Commission on Canada's economic prospects:

Book, writing and groundwood papers:

Annual production of about 290000 tons, will jump sharply over the next 25 years.

	Production Required Tons	Exports Tons	Imports Tons	Cdn. Supply Tons
1960	325,000	49,000	13,000	289,000
1970	485,000	69,000	18,000	407,000
1980	634,000	95,000	25,000	564,000

Estimates were based on a straight line projection of per capita consumption in the years 1920-54. Projected per capita figure in each case was multiplied by the estimate of population for the appropriate year.

Projection of per capita consumption gave a figure of 43.8 lb. in 1960 compared with present per capita consumption of 60 lb. in the U. S.

Since 1930, omitting the war years, 4.5% of consumption was filled by imports and this percentage has been used in all cases for estimates.

Export projections have been based on the assumption that exports will be equal to 15% of total demand for these grades. This is thought a conservative figure.

Major Reason

The major reason for an apparent lag in Canadian per capita consumption of these grades compared with U. S., is the effective existing tariff provisions.

World War II proved papers produced by mills of this segment of the industry carried a high degree of essentiality. It was realized that the wartime industrial economy was dependent on the regular supplies of these papers.

Thus, while controls were applied and grades, weights, colors and time simplified with considerable substitution, the over-all production of this segment industry was never below the 1939 level of approximately 120,000 tons, by 1945 it had reached 162,000 tons, and now runs close to 300,000 tons annually.

Paperboard:

Since 1930, Canadian requirements of paperboard have grown from 155,000 tons to just over 740,000 tons in 1955. A high grade of growth has been accounted for by two factors:

—The growth of the volume of goods distributed in the economy.

—Development of new uses for paperboard, largely as a service commodity in the distribution system.

Paperboard consumption in Canada per $1.00 of consumer spending in the four years, 1951 to 1954, suggests that in very recent years paperboard requirements have been closely related to the volume of goods distributed to consumers; 1951, 119 lb.; 1952, 106 lb.; 1953, 112 lb.; 1954, 111 lb.

It is assumed in projection that the 111 lb. per dollar will remain constant through to 1980 although estimates may be conservative because there likely will be developed new uses which will increase paperboard consumption relative to consumer spending.

In the 20-year period 1936-55, Canadian per capita consumption of container board and boxboard grades has increased by 44 lb. Assumption is this rate will continue and per capita consumption will increase by 11 lb. annually to 1980.

The extension of these per capital estimates gives results very close to estimates based on consumer spending projection and this tends to confirm a reasonableness of estimates.

In the export field, prewar about 84% of Canadian production was used at home and 16% exported. Since World War II, over 90% of Canadian production has been used at home and in the last three years only about 9% has been exported.

It is assumed, however, that growing world requirements in the next 25 years may be expected to result in a relative increase in export demands for the Canadian industry.

To meet these demands, it has been assumed Canada will provide the export markets from 10% to 15% of production. If export is projected at 12½% total demand for container board and boxboard would be as follows:

	Production	Domestic Requirements	Export Requirements
1960	1,035	906	139
1970	1,525	1,336	189
1980	2,180	1,911	269

Paperboard's main use is in packaging although some is used in manufacture of gypsum and wallboards and some is laminated into varying thicknesses for use in building boards.

As uses for paperboards have expanded and grown, mills have expanded production facilities to meet the demand. For almost every packaging purpose, paper has demonstrated its superiority to competing materials.

While over the years there has been a marked increase and utilization of all varieties of boxboard, it is container board which has accounted for most of the growth in the past ten years.

Two main types of paperboard are included in grade classification. These are container boards and boxboards.

Container board production falls into three categories—"liner," "corrugating material" and "container chipboard." In all its forms, it is used almost entirely in the manufacture of shipping cases. "Liner" board is hard, strong and firm board manufactured in two forms—kraft liner and jute liner.

Kraft liner is produced from kraft pulp; jute liner is made from kraft pulp combined with repulped paper.

"Corrugating board" is the fluted paperboard seen in corrugated shipping cases. "Container chipboard" produced entirely from waste paper is laminated between "liners" for manufacturing solid fibre shipping cases as distinct from corrugated cases.

Building boards and building papers:

It is assumed domestic needs will increase proportionately to estimates for future needs of paperboard. If, as current trend indicates, further allowance is made for increased exports, future production of these grades may be roughly:

000's of tons	
1954*	225
1960†	390
1970†	570
1980†	820

*DBS
†CPPA to Gordon Commission

THE MODERN LUMBERJACK fells forest giants with a gasoline-powered hand saw.

Kinds of Board

Products from this group range from hardboard and heavy laminated boards to softer insulating boards and a variety of building papers in impregnated felts.

In recent years of buoyant economic activity, both output and consumption have increased substantially. Stimulated by the Korean war, production in 1951 reached a peak of 257,000 tons and although there was a decline to 222,000 tons in 1952, there has been a gradual increase in each subsequent year in production and 1955 hit a new record slightly higher than the 1951 output. Production is heading for a further high this year with output at a record 147,000 tons in the first half.

As in the case with all segments of the industry, other than pulp and newsprint, exports of wrapping or kraft papers have never been large volume items.

Exports ranged as high as 10% to 15% of production in earlier years, the volume was not then large, only about 15,000 to 20,000 tons.

Exports this year are about the same level—8,407 tons in the first six months.

Restrictions of currency have operated to reduce exports to traditional Commonwealth markets which could be reached under the British Preferential Tariff. The U. S. tariff prevents substantial entry into that market. Fortunately, the growth of demand at home has more than offset the loss of volume in the U. K. and Commonwealth countries.

Here is the outlook in tons:

	Production	Exports	Imports	Supply
1955	258,000	15,000	3,000	244,500
1960	317,000	25,000	3,000	295,000
1970	418,000	35,000	3,000	386,000
1980	515,000	40,000	3,000	478,000

Giant 27 ton TD-24 tractors added to Steep Rock Fleet

Open pit iron mining at Steep Rock is a tough job. It takes rugged machines to work in the abrasive dust and rock and still make the job pay. That's why the new International TD-24's with Torque Converters are bulldozing in the toughest sections of the open pit—and doing the job economically.

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- ✔ The tractor is available with Torque Converter as optional equipment. No matter what type of tractor job, the TD-24 can do it.
- ✔ Finger-tip planetary hydraulic control means ease of handling and low operating costs.
- ✔ 8 speeds forward with a fully reversing transmission.
- ✔ Most versatile speed range of any tractor. No time lost in moving between locations.
- ✔ With the Torque Converter the tractor develops tremendous added push to suit your operation.

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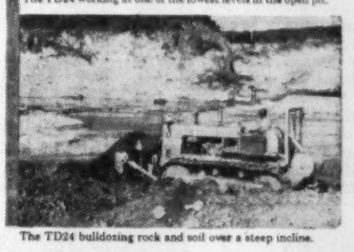
The TD24 working at one of the lowest levels in the open pit.



The TD24 bulldozing rock and soil over a steep incline.

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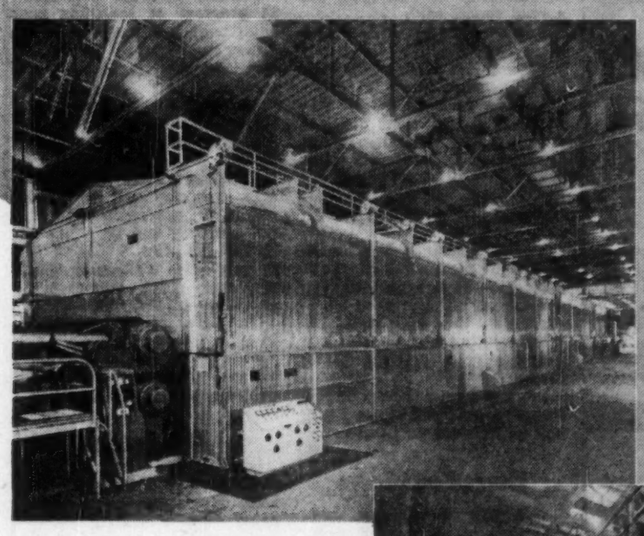

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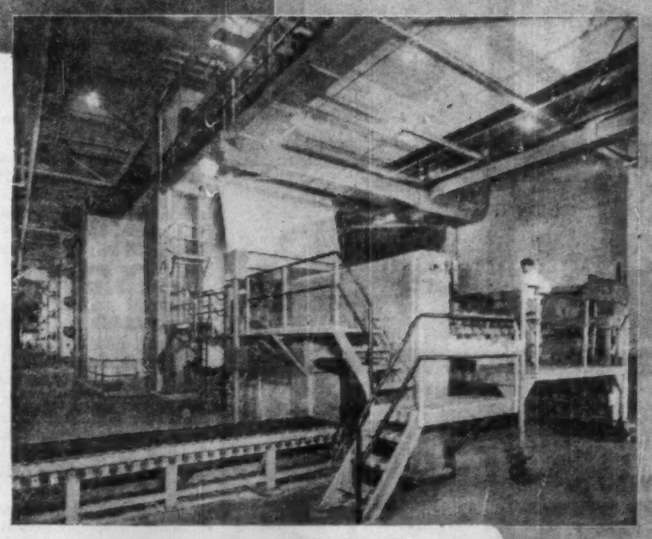

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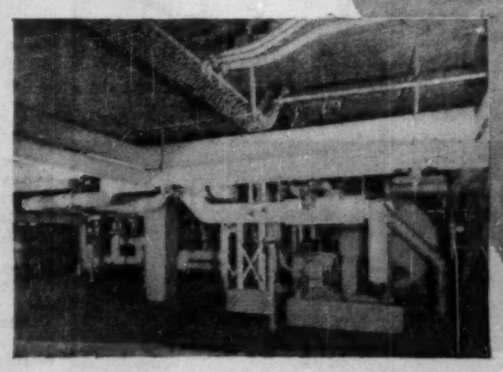

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The Newsprint and Pulp Price Record

Year	NEWSPRINT (N.Y.) $	GROUNDWOOD PULP No. 1 Canadian $	GROUNDWOOD PULP Scandinavian (dry) $	SODA PULP Dom. No. 1 Bleached $	SULPHITE PULP — Bleached — Dom. No. 1 Book $	SULPHITE PULP — Bleached — Foreign Prime $	SULPHITE PULP — Unbleached — Dom. No. 1 Book $	SULPHITE PULP — Unbleached — Foreign Extra Strong $	KRAFT PULP — Bleached — Dom. Northern $	KRAFT PULP — Bleached — Foreign Prime $	KRAFT PULP — Unbleached — No. 1 Dom. $	KRAFT PULP — Unbleached — Swedish $
1939	50	21-32	21½-42	†51	†50-54	45-60	†40-45	34-50		50-70	34-45	26-43
1940	50	31-35	40-50	†58-66	†60-72½	60-85	†50-67½	52-75	65-85	70-95	45-70	45-75
1941	50	31-33		†66	†72½	80-90	†63½	70-75	85-90	90-100	70-75	75-80
1942*	50	45-46		66	72½-76		63½-66		86		73	
1943*	50-58	46		66	76		66		86		73	
1944*	58	46-50		66-72	76-86		66-74		86		73	
1945*	58-61	50		76	86	86	74	74	86	86	73	73
1956*	67-84	50-64		76-93½	86-107½	86-107½	74-94	82-94	97-107½	94-107½	73-89	73-89
1946 (Dec.)	84	‡70-80	107½-100	105-110 *	105-115	115-165	85-95	95-133	100-110	110-120	80-95	90-95
1947	84-90	‡75-85		110-125	115-125	120-165	105-115	120-165	110-135	125-185	95-125	89-145
1948	96-100	‡80-85		130-135	126-135	165-195	125-130	140-165	155-185	165-190	120-135	127½-147½
1949	100	‡60-67½		113-130	118-126	118-130	100-130	100-140	118-147½	125-165	82½-125	82½-127½
1950	100-106	‡70-77½		115-130	118-135	118-160	100-117	100-160	118-141	126-160	82½-120	82½-160
1951	106-116	‡85-110		140-155	135-160	175-225	140-150	153-200	135-200	180-280	140-155	153-250
1952	116-126	‡60-100		140-145	145-160	140-225	135-140	115-200	1451-90	142½-230	100-150	100-200
1953	126	‡60-95		140	140-145	130-140	125-135	110-125	140-147½	137½-142½	95-135	100-105
1954	126	‡60-95		140	127-140	135-142½	120	114-125	140-150	140-147½	100-135	105-110
1955	126	‡60-90		140-145	140-145	140-150	120-125	125-130	142-150½	142½-150	100-120	110-130
1st qtr., 1956	130	‡82½-90		142½-145	145-150	145-150	125	130½	147-152	147½-150	115½-125	120-130
2nd qtr., 1956	130	‡82½-90		142½-145	150	145-150	130	130½	152-155	155	117½-125	125-130
3rd qtr., 1956	130	‡82½-90		142½-145	150	145-150	130	130½	152-155	155	117½-115	125-130

‡Where two prices are shown, they represent high and low for the per iod. Prices are in U.S. dollars per air dry ton (2,000 lb.).
†Quoted "ex-dock Atlantic seaboard." ‡Quoted "delivered."

"Domestic" prices in 1952 are Canadian prices. Prices in the U.S. are not shown as U.S. pulp producers were selling under price ceiling regulations.

*From April 20, 1942, through Nov. 10, 1946, maximum prices for wood pulp and newsprint in the U.S. were fixed by the Office of Price Administration. Prices for European pulp were the same as the OPA maximum prices for domestic and Canadian pulp, plus freight charges over and above a fixed transportation allowance.

Note: There were no quotations for European pulp after September, 1941. Resumption of imports from Europe began in July, 1945. Prices for foreign pulp are quoted "ex-dock New York" or "ex-dock Atlantic seaboard" (except under OPA). Freight charges normally add $5-10 a ton to pulp prices quoted "ex-dock." From mid-1949 to mid-1950, foreign pulp was quoted "full freight allowed."

Unless otherwise specified, domestic and Canadian prices are quoted "f.o.b. pulp mill" (with varying maximum freight allowances since December, 1946), except during OPA control when quoted "delivered," plus freight charges over and above specified maximum freight allowances. Quoted "full freight allowed" in most cases after July 1, 1949.

Records Set In Output, Sales Report Paper Box Companies

Bathurst

Bathurst Power & Paper Co. through its container division produces a substantial amount of corrugated boxes and allied products from kraft linerboard and corrugating board.

Toward the end of 1954 the container division was formed by the company to correlate the operations of **Canadian Wirebound Boxes Ltd.** of Toronto and Montreal, acquired in 1954, with the company's other two subsidiaries manufacturing corrugated boxes, **Kraft Containers Ltd.**, of Hamilton, and **Shipping Containers Ltd.**, now of St. Laurent, Que. In 1955, the company acquired the remainder of the issued class A shares of Canadian Wirebound Boxes, Limited, now a wholly owned subsidiary of the company. The container division markets corrugated boxes under the name Bathurst Containers.

In 1955 the box plants converted a total of 90,220 tons of container boards into corrugated boxes. The volume and value of sales of corrugated boxes and allied products were greater in 1955 than in any previous year.

In May, 1956, the prices of all Bathurst corrugated products were adjusted upwards. This adjustment was made to assist the company in meeting to some extent the additional manufacturing costs being incurred through continuing increases in costs of materials, labor rates and transportation, etc. No upward adjustments in the selling prices of the products marketed by the container division had been made for a period of 32 months prior to this change.

With the introduction of colored linerboards by the mills division in 1955, corrugated boxes were produced in a wide range of colors. In addition, a broad and more diversified range of colored corrugated boxes are now being manufactured on special equipment installed by the container division.

The enlargement of the plant at St. Laurent, Que. was completed in 1955, whereupon operations carried on at the plant at 155 Beaubien St. W., Montreal, were discontinued and transferred to the St. Laurent plant. Thereafter the land and buildings located at 155 Beaubien St. W., Montreal, were sold.

The expansion and consolidation of manufacturing and sales operations at the St. Laurent plant have substantially increased the capacity of the company in the Montreal and district area to produce corrugated boxes and allied products and have improved facilities for rendering service to customers in that area, the annual report said.

Construction of a new box plant at Whitby, Ont. was commenced in September, 1955, on property adjacent to existing harbor facilities on Lake Ontario. The new plant provides approximately 200,000 sq. ft. of accommodation and has been designed to allow for future expansion. The Whitby plant commenced operations during April, 1956.

Capital additions in 1955 included the installation of equipment for background printing and tinting of corrugated boxes and also the installation of color printing presses for three and four color printing operations.

For the main write-up on this company, see the specialty paper and paperboard section.

Dom. Containers

Dominion Containers Ltd., manufactures corrugated packaging cases, folding and set-up boxes, displays and transparent boxes. Company has two plants, both located in Montreal.

One of the plants produces corrugated products exclusively. The other makes folding and set-up boxes and in addition is the site of the company's head office. The new corrugating plant was put into production in April of 1954.

Annual capacities approximately 28,000 tons of corrugated products and 5,000 tons in set-up and folding boxes.

Company has two subsidiaries, **Standard Paper Box Manufacturing Ltd.** and **King Paper Box Manufacturing Ltd.**, both located in Montreal and both engaged in selling company's products.

Capitalization comprises 300,000 shares of common stock, no par value, of which 103,847 are outstanding. Net profit in 1954 (latest available) was $314,737. Working capital was 949,750 as at Dec. 31, 1954.

Gair Co.

Gair Co. Canada Ltd. is a wholly owned subsidiary of **Robert Gair Co.**, New York. Company manufactures and sells corrugated and fibre shipping containers and folding paperboard cartons. It manufactures paperboard for its own use.

Other products made by Gair and its subsidiaries include counter display cartons, cracker caddies, paper specialties, gummed tape, and mechanical pulp.

Operating properties include two paperboard mills in Toronto and one in Montreal, a pulp mill at Campbellford, Ont., and folding carton plants at Toronto, Montreal, Winnipeg (2) and Edmonton. There are shipping container plants at Toronto, London and Montreal.

Company benefitted from an upsurge in business in 1955, particularly in the last half, and its 12 mills and plants ran full out most of the year.

The Montreal shipping container plant was added in 1955. An 81,000 sq. ft. building was bought and made ready to operate by the end of the year.

The specialties division doubled its gummed tape capacity by installing a 60-inch gummer. In addition to its primary function, this can be used to apply certain coatings or to laminate aluminum foil to boxboard or paper.

A high speed five-color printing press installed in the Mount Dennis plant in Toronto reduced manufacturing costs and improved the quality of printing on cartons, company reports. This improved company's competitive position, particularly in the food field. Gair Canada is now entering markets in which unprinted cartons previously were used in combination with printed wrappers.

Further progress was made in program of installing new equipment and facilities to increase and speed up production, and improve quality, in the company's paperboard mills.

Capital expenditures by Gair Canada in 1955 totaled $1,529,000 ($1.2 million the previous year).

Financial results of the Canadian company are no longer published separately. The parent company and its subsidiaries had net sales in 1955 of $160 million ($144 million in 1954), and net profit increased to $9,320,000 ($7,648,000).

The Canadian company's sales in 1953, the last year for which figures are available, were $23.8 million. Tonnage sales of all products totaled 109,397 tons.

Hendershot

Hendershot Paper Products Ltd., Hamilton, makes corrugated paper shipping containers and corrugated single face specialties. It has two plants at Hamilton and has bought 23 acres suitable for a new plant site recently.

Company reports its plants have been operating at capacity. It should continue to do so with the demand that persists from all quarters, says President John C. Colclough. Main sales effort has been in food packaging field.

Value of sales has risen to about $3 million a year, from about $900,000 a year in past 10 years.

An issue of $450,000 6% preferred stock, $100 par, was offered recently, and existing preferred and common shareholders have been granted rights to buy new common shares at $6 each on basis of two rights for each preferred share and one right for each four new common. The old common was split four-for-one.

Proceeds are being used for expansion and to build working capital. Existing facilities were not adequate to install a new high-speed corrugator.

The number of preferred shares authorized has been increased to 10,000, the old 5% preferred having been redesignated 6% as well. There will be 7,000 outstanding on completion of financing. Common will now consist of 240,000 authorized, 155,000 issued.

Net profit in 1955 was $169,300, 33% above the 1954 level. Records were set in both production and sales.

Hinde & Dauche

Hinde & Dauch Paper Co. of Canada, Toronto, makes jute liners, wrapper and header stocks, and a wide variety of paperboards at its paper mills, and corrugated and solid fibre boards, boxes, folding cartons, etc., at the box factories.

Plants are at Toronto, Etobicoke, Trenton, Chatham and Montreal. The Etobicoke box plant, built late in 1954 for $3 million. Capacity is 75 million sq. ft. of corrugated paper products monthly.

Company is converting the Trenton board mill from use of cereal straw to pulpwood as its raw material. This is expected to increase by 50% its capacity of 125 tons a day of corrugating and lightweight chip and kraft liner boards.

The Chatham plant has a capacity of 28 million sq. ft. of corrugated paper products monthly. The Montreal plant's operations are confined to fabrication of solid fibre and corrugated shipping boxes from the paperboards produced at Toronto and Trenton.

Company bought all the stock of **Martin-Hewitt Containers Ltd.**, Peterborough, and of **Corrugated Paper Box Co.**, Toronto, in 1954. Martin-Hewitt makes corrugated shipping containers, Corrugated Paper Box corrugated and solid fibre shipping containers and folding cartons. A Corrugated Paper Box subsidiary, **Hilton Bros Ltd.**, has plants at Winnipeg and Calgary.

Production and sales reached new records in the year ended Oct. 31, 1955. Net sales were $28 million ($27.2 million the year before). Paperboard mills output reached 104,659 tons (99,632).

Consolidated net profit was $1,956,704 ($1,503,560 in the 10 months ended Oct. 31, 1954), equal to $5.44 ($4.77) a share.

Capitalization consists of $3.5 million 2¾%-3½% serial debentures due 1957-64, and 360,000 common shares (out of 450,000 authorized). Financial arrangements have been made under which the company may issue up to an additional $2 million 10-year debentures to provide funds for the new Trenton mill and other projects.

A majority of the common stock is held by **Hinde & Dauch Paper Co.** of Ohio, which is now part of **West Virginia Pulp & Paper Co.**

Maritime

Maritime Paper Products Ltd., is a holding company with one wholly owned subsidiary, **Industrial Containers Ltd.** The latter is engaged in fabricating cartons and other corrugated products for industrial uses and its plant in Halifax.

Capitalization comprises 8,750 5% cumulative preferred shares ($20 par) of which 6,403 are outstanding and 15,000 authorized and outstanding common shares, no par value.

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55-15-56

Newsprint Firms Crack Along At Record Production Pace

Abitibi

Abitibi Pulp & Paper Co., directly and through subsidiaries manufactures newsprint, sulphite pulp, printing and fine papers and paperboards. It is one of the world's largest manufacturers of pulp and paper, with a total production of 1,001,715 tons annually. This includes 793,560 tons of newsprint, 85,972 tons of printing and fine papers, 65,504 tons of bleached sulphite and other pulps and 56,679 tons of building and paperboards. There are 19 newsprint machines in the Abitibi mills.

Properties held include six newsprint mills; Iroquois Falls, Sault Ste. Marie, Fort William, and Port Arthur, Ont.; Pine Falls, Man.; and Beaupre, Que. There is a bleached sulphite mill at Smooth Rock Falls, Ont., and a corrugating board and hardboard mill at Sturgeon Falls, Ont.

Company's subsidiary, **Provincial Paper Ltd.,** operates mills for the production of fine paper at Mille Roches, Port Arthur, Thorold, and Georgetown, Ont.

A wholly owned U. S. subsidiary, **Abitibi Corp.,** was formed last year to set up a $16.5-million hardboard mill now under construction at Alpena, Mich.

Abitibi owns only 10% of the shares of **Alaska Pine & Cellulose Ltd.,** having sold 40,000 of its 50,000 shares in 1954. Alaska Pine & Cellulose owns and operates two cellulose mills on the Pacific Coast.

In August 1956 a $15-million issue of 4½% convertible debentures Series A, due Sept. 15, 1966, was offered at par. Company will use proceeds to help finance its $33.5-million expansion program in Canada.

At Fort William mill a new high-speed newsprint machine with a 100,000 ton annual capacity is scheduled for operation in summer 1958. Project also includes increased groundwood and sulphite pulp. Estimated cost is $23 million. Annual capacity at Pine Falls is to be increased by 30,000 tons of newsprint by fall 1957. A large part of program is already complete. Total cost is estimated at $7.5 million. The new Platewood mill at Sturgeon Falls is slated to begin operation by October 1956. It will have annual capacity of 13 million sq. ft. of lumber.

It is intended to meet $16.5 million cost and necessary working capital for U. S. subsidiary's Alpena mill from funds on hand and available from future operations.

Abitibi had working capital at June 30 amounting to $37.3 million ($40.1 million a year earlier).

Consolidated net profit for 1955 was $13,936,026, 31.2% higher than net profit of $10,625,901 for 1954. Earnings were equal to $25.34 ($17.65 a year earlier) per 4½% preferred share and $3.20 ($2.49) per common share. Dividends amounted to $1.12½ (46⅞c per 4½% preferred share and $87½c on each old $1.50 preferred) and $1.35 ($1.20) per common share, based on shares outstanding.

Company has declared a dividend of 42½c per common share payable Oct. 1, 1956, to shareholders of record Sept. 1. Previously a quarterly dividend of 37½c was paid from October 1955 to July 1956.

Consolidated net profit for the first half of 1956 increased 23% to $7,990,684 ($6,508,342) and earnings were equal to $1.85 ($1.49) per common share. Net sales rose to $65.5 million ($59.7 million). All company's production is being readily absorbed by Canadian, U. S. and other markets and outlook for remainder for year is good, said President D. W. Ambridge. However, Abitibi is concerned about substantial mill wage increases under two-year contract, higher freight rates (6% in U. S., 7% in Canada with further increase possible in October), and the rising cost of supplies and equipment.

Capital expenditures in 1955 totaled $9.6 million (7.2 million) with all 11 mills participating in improvement program.

The Quebec Department of Lands & Forests allocated Abitibi some of the additional forest lands required to ensure operation of the Beaupre, Que., newsprint mill.

Total production in 1955 topped 1 million tons (954,000 tons) for first time, due to expansion and improvements in last decade. Abitibi made some moderate price increases in several products, including newsprint, to compensate for higher production costs which most customers accepted. The Quebec Government has enacted legislation to control newsprint price and distribution to Quebec consumers who wish to avail themselves of it.

Net sales for 1955 rose to a record $123.2 million ($114 million). The unprecedented and unexpected rise in newsprint demand came mainly from the U. S., but orders from Europe, South America and Australasia also rose substantially.

Abitibi further reduced outstanding first mortgage bonds Series A, and eliminated $9,388,300 outstanding convertible debentures through conversion of $8,841,700 into common shares and redemption of balance. In January 1956 company issued an additional 353,668 common shares upon conversion of debentures and 15,150 under option agreements for senior executives. Company has set aside $665,860 for purchase of additional 4½% preferred stock.

Capitalization outstanding at Aug. 31, 1956, included $1 million 3½% first mortgage serial bonds, Series A due April 1957; $16,340,000 3½% first mortgage 20-year sinking fund bonds, Series A due April 1967; $10 million 4% first mortgage sinking fund bonds, Series B due July 1974; $15 million 4½% convertible debentures, Series A, due September 1966; 535,225 4½% cumulative redeemable preferred shares, $25 par; and 4,163,218 common shares, no par.

Anglo-Nfld.

Anglo-Newfoundland Development Co. manufactures newsprint and unbleached sulphite at its mill in Grand Falls, Newfoundland. Mill is operating at capacity and the estimated newsprint production for 1956 is 245,000 tons and 16,000 tons of unbleached sulphite pulp, compared with 232,000 tons of newsprint and 12,000 tons of unbleached sulphite pulp in 1955.

Plans are in progress to increase production of the mill, mainly through greater utilization of present facilities, company's timber limits to supply wood. As a result of modernization and machine speed-up, further increase in production of newsprint and unbleached sulphite is anticipated for 1957-1958. The company's timber limits total 7,456 sq. miles partly freehold and partly crown leased.

Hydro-electric power plants are operated on the Exploits River at both Bishop's Falls and Grand Falls. Present installed capacity is over 75,000 hp and another 50,000 hp undeveloped power is available.

Research continues at the mill and company is presently channeling its efforts in two directions: improvement of closer control of groundwood quality and development of more hydrodynamically correct paper machine headboxes.

Through its wholly owned subsidiary, **Terra Nova Properties Ltd.,** extensive mineral and mining rights are held in Newfoundland. Ore production for 1956 is estimated at 340,000 short tons. Terra Nova participates in 50% of the net profits of **Buchans Mining Co.** before taxes.

Montmorency Shipping Ltd. another subsidiary, operates a fleet of chartered vessels carrying newsprint to American customers of the parent company. This company showed a profit of $13,264 in 1955 compared with $2,335 for the year 1954. Another subsidiary is **Gaspesia Sulphite Co.** which produces bleached sulphite pulp (see separate report in the pulp section of this issue).

Consolidated net profit for 1955 was $4,632,139 compared with $3,631,516 for 1954. Consolidated working capital at Dec. 31, 1955, amounted to $22,028,640 against $20,032,211 at the same time the previous year.

In April, 1955, company was granted an 18-month license on forest areas in the vicinity of Sioux Lookout in Northern Ontario. Company says surveys and studies are now being carried out in that area.

Anglo-Canadian

Anglo-Canadian Pulp & Paper Mills Ltd. produces newsprint paper as well as paperboard and unbleached sulphite pulp.

Rated capacity of the mills is some 233,000 tons of newsprint, 24,000 tons of paperboard and 65,000 tons of unbleached sulphite pulp (in excess of capacity requirements for newsprint) per annum.

Products are marketed largely in the U.S. where 80% of newsprint output is sold. The same market takes about 60% of the pulp which the company sells. Balance sold includes Canadian and the U.K.

Mills operated at capacity throughout the year, output of all products totaled 388,067 tons (376,356 tons in the previous year). Quebec mill produced 237,187 tons (226,669 tons) of newsprint, 61,289 tons (58,700 tons) of unbleached sulphite pulp, and 20,566 tons (20,272 tons) of paperboard.

Capital expenditures amounted to $5,522,550 ($3,404,784) including $2,992,678 spent by **Dryden Paper Co.,** a subsidiary. The Quebec mill's major expenditures were $339,200 for improvements and additions to electrical systems; $218,509 for equipment to provide increasing board mill capacities; and $178,403 on a $750,000 refuse burning plant scheduled for completion this year which will add to steam available and also provide for disposal of bark.

Demand continues to increase and mills are operating at capacity, it was reported at the annual meeting in April. Company said 1956 prospects were good and it expects its mills to operate at maximum rate.

Consolidated net profit for the year ended Dec. 31, 1955, increased to $5,434,388 from $4,651,474. Total sales were higher at $46,501,047 against $43,373,482.

At Dec. 31, 1955, consolidated working capital totaled $18,943,987 against $15,743,871 at the same time the previous year.

Bowater's Nfld.

Bowater's Newfoundland Pulp and Paper Mills Ltd. at Corner Brook, Nfld., operates one of the largest single integrated pulp and paper mills in the world. Its six machines have a current annual newsprint capacity in excess of 310,000 tons and its pulp production surplus to its requirements for newsprint manufacture amount to 50,000 tons.

Company is a subsidiary of **Bowater Paper Corp. of North America,** owned in turn by **Bowater Paper Corp.** in the U. K.

An expansion program has been initiated expected to increase newsprint production capacity to 340,000 tons annually. Bowater's production is running at a rate of about 1,000 tons per day of newsprint, 150 tons per day of sales sulphite, giving an annual output of some 310,000 tons and almost 50,000 tons respectively.

To produce this an annual cut of about half-a-million cords of wood is required while a further 100,000 cords are cut and shipped to associated mills in the U. K. Timberlands cover an area of over 11,000 sq. miles of which some 2,250 sq. miles are freehold, the remainder held under licenses from the Newfoundland Government generally for a term of 99 years from 1938.

Some 85% of the newsprint output is sold to publishers in the U.S., mainly under 15 year contracts dating from 1954, the remainder being sold in the British Commonwealth and overseas market. Surplus sulphite pulp is sold primarily in the U. K.

In 1955, last stages were completed in development plans which led to the present level of production. A new barking mill, new digester, new line of grinders, and a new boiler were all completed giving the mill an essential reserve and supporting services to meet all eventualities. Only one item is still outstanding on this program, erection of a new 6,600 kva steam turbine which is scheduled for operation this autumn.

Intensive studies are now being carried out to determine possibilities of further speed-up potential and other associated problems of further development.

Total annual value of company's export amount to some $41 million including exports (f.o.b.) of newsprint paper totaling $33 million, pulp sales, $5 million and pulpwood, $3 million.

Consolidated net profit for the 12 months ended Dec. 31, 1955, amounted to $3,822,264 compared with $5,580,531 for the 15 months ended Dec. 31, 1954.

Results for 1955 included those for power production and distribution for only part of year. In April, 1955, **Bowater Power Co.** was formed to acquire and operate company's hydro-electric installations.

Bowater Power took over these on June 1, 1955, on basis of an independent appraisal of $34,578,800. Price was $18,628,800 cash and balance $1,595,000 A shares of $10 each as fully paid in Bowater Power.

At Dec. 31, 1955, working capital totaled $17,482,516 against $25,641,071.

Authorized capital now con-

(Continued on page 82)

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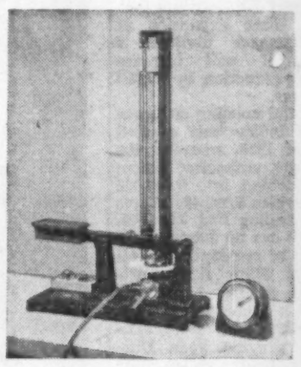

To test a mill-run of fine paper for smoothness, Provincial's laboratory technicians take a sample as it comes off the machine, imprison it between two polished metal surfaces under a definite pressure, and create a vacuum beneath it. Then they measure the time it takes for the air to leak back in, through the tiny channels in the surface of the paper. The longer the time the smoother the surface!

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Booming Pace Set By Newsprint Companies

(Continued from page 81)

sists of 10 million common shares npv. of which 6.4 million have been issued and have a stated $32 million value.

Bowater of N. A.

Bowater Corp. of North America is a wholly owned subsidiary of **Bowater Paper Corp.**, London, Eng., and owns a number of operating subsidiaries on the North American continent. It provides these with administrative, management and engineering services and finance as required.

Company owns all the outstanding shares of **Bowater's Newfoundland Pulp & Paper Mills Ltd.** (see newsprint and wood pulp sections for separate writeups), **Bowater Power Co.**, and **Mersey Paper Co.** (see newsprint section), all Canadian subsidiaries; and **Bowater's Southern Paper Corp., Bowater's Fibreboard Co.**, and **Bowater Paper Co.**, U. S. subsidiaries. It also controls 11 other subsidiaries whose operations include various ancillary activities.

Company also holds a substantial investment in the common and founders shares of **British Newfoundland Corp.**, known as Brinco. Brinco was formed in April 1953 by seven British and Canadian companies, including Bowater Paper Corp. Brinco holds options from the Newfoundland Government for water power, leases mineral exploration leases and timber leases in Newfoundland and Labrador.

Company acquired the assets of **Mersey Paper Co., Ltd.**, for about $45.6 million this summer. It acquired these through a newly formed subsidiary, **Scotian Paper Co.**, since renamed **Mersey Paper Co. Ltd.** It bought about 78% of the shares for $230 each from the estate of the late I. W. Killam and minority shareholders later agreed to sell their shares for same price. Plans call for expenditure of $4.5 million to increase newsprint capacity from about 144,000 tons to 165,000 tons annually, through speedup of two newsprint machines.

Bowater's Southern Corp. owns and operates integrated newsprint and kraft pulp mills on the Hiwassee River at Calhoun, Tenn., which contain two of the fastest newsprint machines on the continent and a pulp dryer for surplus kraft pulp. Construction was completed in summer 1954. Initial designed annual capacity of 125,000 tons of newsprint and 50,000 tons of surplus pulp was reached in October 1954. Since then production has increased to 200,000 tons and 75,000 tons respectively. Installation of a third newsprint machine is under way and slated for operation this December, after which annual production should be approximately 300,000 tons of newsprint and 45,000 tons of surplus pulp.

This subsidiary's initial financing required $60 million capital. U. S. insurance companies and banks provided $45 million through purchase of first mortgage bonds and serial notes. Remaining $15 million, subscribed in cash, is held by company as equity capital. Present expansion is estimated to cost an additional $30 million, of which U. S. banks and insurance companies are providing $20 million through issue of further first mortgage bonds and serial notes. Of the $10 million balance $5 million has been provided from Southern's internal resources and $5 million by company's subscription of further equity. This raises total equity it holds in Southern to $20 million.

Bowater's Fibreboard Co. of Calhoun, Tenn., was incorporated November 1955. It is acquiring from Southern a site where it will build a mill with a productive capacity of 120 million sq. ft. of board annually. Production is scheduled to begin in early 1958. Estimated cost is $4.5 million, including working capital.

Bowater Paper Co. of New York provides sales organization for marketing North American operating companies' products and will also undertake marketing of Fibreboard's products.

Net profit of Bowater Corp. of North America for the 12 months ended Dec. 31, 1955 was $6,538,935, compared to net profit of $5,228,286 for the 15 months ended Dec. 31, 1954 and net profit of $3,211,814 for the 12 months ended Sept. 30, 1953.

Earlier this year an issue of $17.5 million 5% cumulative redeemable preferred shares, $50 par, was sold at par. Proceeds will be used for general corporate purposes and expansion.

Capitalization outstanding upon completion of this financing includes 350,000 5% cumulative redeemable preferred shares, $50 par; and 8.4 million common shares, no par.

Cdn. International

Canadian International Paper Co., a wholly owned subsidiary of **International Paper Co.**, New York, manufactures newsprint and bleached and unbleached sulphite pulp. Newsprint produced consists of about 80% groundwood pulp and about 20% sulphite pulp. About 80% of the newsprint output is sold to publishers in the U. S. and the balance in various countries, principally the U. K., Australia and Latin America.

Bleached sulphite pulp is manufactured at three mills which produce special grades of bleached sulphite pulp used as raw material in the manufacture of rayon, Cellulose film, plastic and allied products. Some bleached sulphite is used by paper mills of the parent company and its subsidiaries in Northern U. S.

Its kraft pulp mill at La Tuque, Que., has an annual capacity of 300,000 tons of unbleached kraft pulp of which 115,000 tons is converted into kraft liner board, paper and corrugating medium with the balance being bleached for various grades of specialty pulps. Approximate aggregate annual capacity of other company and subsidiary plants on a 308-day basis is 1,172,000 tons of which 895,000 tons are newsprint and 277,000 tons are bleached and unbleached sulphite. The mill also produces 200 gal. of turpentine per day.

A new record production of 864,000 tons of newsprint was set in 1955. This reflects partial completion of a $42-million postwar expansion of newsprint facilities which will bring the company's manufacturing capacity to 920,000 tons per annum. This will represent a 60% increase in capacity over original designed capacity, equivalent to a new mill capable of producing 1,200 tons per day, achieved by speeding up existing machines.

Properties of the company and its subsidiaries include the Trois Rivieres and Gatineau newsprint mills in Quebec, the Dalhousie newsprint mill, steam and steam-electric plants in New Brunswick, bleached pulp mills at Temiskaming, Que., and a Hawkesbury, Ont., and a kraft pulp mill at La Tuque, Que.

Timber holdings comprise 25,200 sq. miles, largely in Quebec. The company reports these holdings are considered adequate to provide for the requirements of the present mills in perpetuity.

Company subsidiaries include: **New Brunswick International Paper** operating a paper mill at Dalhousie, N.B.; **The Continental Paper Products Ltd.** making paper bags, boxes and specialties, drinking cups and other paper products at its Ottawa and Cap-de-la-Madeleine plants; **International Fibre Board Ltd.** manufacturing "TEN/TEST" insulating building board at its Gatineau, Que., plant; **International Plywoods Ltd.** producing hardwood panels at its Gatineau, Que., plant; **Northern Veneer and Plywood Company Ltd.**, La Tuque, Que.; **Commercial Alcohols Ltd.** in its plant at Gatineau, Que., produces pure ethyl alcohol, shellac and antifreeze; **Industrial Cellulose Research Ltd.** which does research in Cellulose products, rayon, paper, etc.

In May of 1955, CIP acquired all outstanding shares of **Hygrade Containers Ltd.** which makes corrugated shipping containers at its London, Ont., plant. Hygrade also operates the new $2,500,000 Pointe-aux-Trembles plant completed Feb. 1, 1956, and is proceeding with plans for building a third container plant in Toronto at an estimated cost of $3 million.

Capital expenditures will amount to some $18.7 million in 1956 of which $6.5 million is to complete the La Tuque plant and $9.1 million is to complete expansion programs in progress, mostly newsprint.

Parent company showed consolidated net profit of $83,105,016 for 1955, 15.3% higher than $67,475,584 in 1954.

Canadian production in tons totaled: 1,318,024 tons in 1955 and includes: newsprint, 864,469 tons; dissolving and other pulps, 448,910 tons; and miscellaneous papers, 4,645 tons.

For the first six months of this year, the parent company showed consolidated net profit of $43,305,434, 12% higher than $38,590,953 in the corresponding period last year.

Consolidated Paper

Consolidated Paper Corp. is one of Canada's largest producers of newsprint and pulp and paper products.

The company owns five mills with a total daily capacity of some 2,571 tons of newsprint paper, 186 tons of kraft paper, 46 tons of kraft pulp, as well as cardboard, wrapper, and other miscellaneous products.

About 65% of the company's pulp and paper products are exported to U. S. with considerable tonnage being sold and used in Canada. Balance is distributed to establish markets in the U. K., Eire, South Africa, Australia, New Zealand, the West Indies and India. Other export destinations are Mexico, Brazil, Uruguay and Chile.

Paper mills are owned at Shawinigan Falls, Grand'mere, Port Alfred, Three Rivers, and Cap-de-la-Madeleine, all in Quebec. Newsprint capacity currently amounts to some 791,868 tons annually. Products of the company include kraft wrapping paper, sold under the name "Wayagamac Pure Kraft," cardboard sold under the trade name "Laurentide Board" and kraft paper towels under the name "Copaco Kraft."

Capital expenditures in 1955 for replacements, improvements and expansion in manufacturing divisions amounted to $6,461,516. Newsprint capacity was increased by 20,000 tons during the year. To maintain operating efficiency, $8,773,025 was spent on maintenance and repairs. Approved but unexpended appropriations for both manufacturing and woodlands division stood at $7,331,217 at Dec. 31, 1955.

In the April annual report, it was noted approximately 55,000 tons of new newsprint capacity came into operation since the annual meeting in 1954, and the tonnage was said profitable, as little additional overhead was required for its manufacture and it utilizes existing mill facilities to a fuller extent. Return on capital expenditure involved is satisfactory, and will be reflected in future earnings.

An additional increase of 55,000 tons per year in newsprint capacity should be in production within the next two or three years. Thus, over three to four years, capacity will have been increased by 110,000 tons a year. Total capacity of present machines will then be approximately 300,000 tons a year greater than for that which they were originally designed. This increase in capacity is equivalent to the output of a very large newsprint mill which at today's price would cost $100 million but to the company would cost less than $40 million.

The major expansion is taking place at the Port Alfred division where capacity of newsprint will be increased from 650 tons a day to 800 tons per day. When expansion at the Wayagamack division is completed, it will increase newsprint production by 17,000 tons per year.

At a special meeting of shareholders, a bylaw was enacted in April of 1955, whereby the 3,500,000 npv. authorized shares were subdivided into 7,000,000 shares of which 5,132,484 shares were outstanding Dec. 31, 1955.

Company has no funded debt as a result of redemption of all outstanding 3½% first mortgage bonds on Feb. 1, 1955.

Net profit increased to $13,747,019 in the year from $11,848,327 the previous year. During the six months ended June 30, 1956, net profit was $7,852,962 against $6,798,352 in the same period of 1955.

Working capital at Dec. 31, 1955, amounted to $54,513,795 compared with $52,105,016 at the end of 1954.

Crown Zellerbach

Crown Zellerbach Canada Ltd., a subsidiary of **Crown Zellerbach Corp.**, San Francisco, is a self-contained, integrated enterprise. It owns or holds large timber stands and conducts logging operations. It produces pulp, paper and paper products for sale in Canada and export to the U. S., Australasia, the Orient, South Africa and Latin America. It operates newsprint, pulp and paper plant at Ocean Falls, 350 miles north of Vancouver, and a paper converting plant in Vancouver.

Principal subsidiaries are **Canadian Western Lumber Co.** and **Elk Falls Co.** Canadian Western and company each own 50% of Elk Falls' outstanding stock. Canadian Western logs and manufactures lumber and other forest products in B. C., while Elk Falls produces newsprint at Duncan Bay, Vancouver Island, B.C.

Other subsidiaries include **Hudson Paper Co., Bartram Paper Products Co., Northern Pulpwood Ltd., Comox Logging and Railway Co., Canadian Tugboat Co., Fraser Mills Sash, Door & Shingle Co., Crown Lumber Co., Security Lumber Co.** and **Coast Lumber Yards Ltd.**

Total production of Ocean Falls plant for 1955 was 174,730 tons (168,650 tons a year earlier), consisting of 87,189 tons (86,853 tons) of newsprint 66,986 tons (65,253 tons) of wrapping paper, and 20,555 tons (16,544 tons) of pulp. Elk Falls newsprint production was 96,738 tons (80,289 tons).

Canadian Western became a subsidiary through exchange offer made this July whereby company offered Canadian Western shareholders to exchange one common share, no par, for one Crown Zellerbach ordinary share, $2 par. U. S. Crown Zellerbach, which owned 3,110,610 of the 3,196,550 shares outstanding accepted. Exchange offer remains open to minority holders for four months. If offer is accepted 100% company will issue an additional 85,940 shares.

This summer a $12.5-million issue of 270,000 ordinary shares was sold at $25 each. A further 230,000 snares were allotted to U. S. Crown Zellerbach which took them up at $25 each.

Company will use proceeds from the 500,000 additional shares to finance in part expansion and modernization of company and its subsidiaries, including Canadian Western Lumber Co. and Elk Falls Co., which will amount to $55.2 million during 1956-58. Additional funds will be available from internal sources, mainly depreciation provisions and undistributed earnings.

Of these expenditures $35.7 million are for 1956, $12.5 million for 1957 and $7 million for 1958. Comparable expenditures amounted to $9.6 million in 1955 and $8.4 million in 1954.

Combined consolidated net income for Crown Zellerbach Canada, Canadian Western and Elk Falls for the 12 months ended March 31, 1956, was 13.1% higher than for same period a year earlier ($9,886,000 against $8,739,000). Earnings were equal to $1.41 ($1.24 in earlier period) per ordinary share. Net profit for the three months ended March 31, 1956, was $2,157,000, equal to 31c per ordinary share.

Company itself showed net income of $3,223,084 for the eight months ended Dec. 31, 1955, compared to net income of $4,573,735 for 12 months ended April 30, 1955. Fiscal year end has been changed to calendar year.

Company will resume payment of ordinary stock dividends with a 25c per share distribution payable Oct. 1 to shareholders of record Sept. 17. It has given no indication as to proposed frequency of future payments. It has not paid ordinary stock dividends since April 1, 1954. In year ended April 30, 1954, it paid $2 ($2) per ordinary share. This was previous to five-for-one split this June.

In June 1956 company split the then outstanding 750,000 ordinary shares, $10 par, into 3,750,000 ordinary shares, $2 par, and increased authorization from 750,000 shares, $10 par to 15 million shares, $2 par.

Capitalization outstanding (including proposed share issue to minority shareholders of Canadian Western), will consist of 19,989 6% cumulative nonvoting preferred shares, $100 par and 7,446,550 ordinary shares, $2 par. Funded debt, including current portion, of Canadian Western and Elk Falls amounts to $14,514,000.

Donnacona

Donnacona Paper Co. operates a newsprint mill with groundwood and sulphite pulp plant, near Quebec City, Que. It also manufactures insulating board and acoustical board. Control of the company is held by Howard Smith Paper Mills.

About 90% of the company's newsprint output and about 65% of its sulphite pulp available for sale is sold in the U. S. Sale of insulating board products is world-wide.

Increased demand for Donnacona products has resulted in efforts to improve production. Alterations to No. 2 paper machine were completed last year, raising its capacity by 20%. At the same time, much additional equipment was installed to enable it to manufacture rotogravure papers along with its regular newsprint grades. Work is progressing on No. 3 paper machine where productive capacity will be raised in several steps over the next 18 months, annual report said.

To provide raw material for the increased production, a new drum barker was constructed at Jacques Cartier River barking plant, and new grinders installed at the groundwood mill with capacity of 65 tons per day. Screenings from the new grinders flow to the insulating board mill where new equipment and modifications have improved both capacity and efficiency.

Annual capacity of company's plants is:

—Newsprint 105,000 tons;
—Sulphite pulp 58,000 tons;
—Groundwood pulp 88,000 tons;
—Insulating board 100 million sq. ft. per annum.

Figures for combined annual volume of products for sale of the parent company and subsidiaries includes output of Donnacona Paper and are shown in the report on Howard Smith Paper Mills Ltd. in the fine paper section of this report.

Company owns in fee or leases timber lands adjacent to the St. Lawrence River and comprising practically all the stand in the watersheds of the River Jacques Cartier, River Sault au Mouton and the Bersimis River in Quebec, aggregating about 1,721 sq. miles, estimated to contain some 12,600,000 cords of pulpwood.

Of the total held under lease or freehold, 752 sq. miles is the company's share of the Bersimis timber lands, purchased by Donnacona and **Anglo-Canadian Pulp and Paper Mills** in 1947 from the **Brown Corp.**

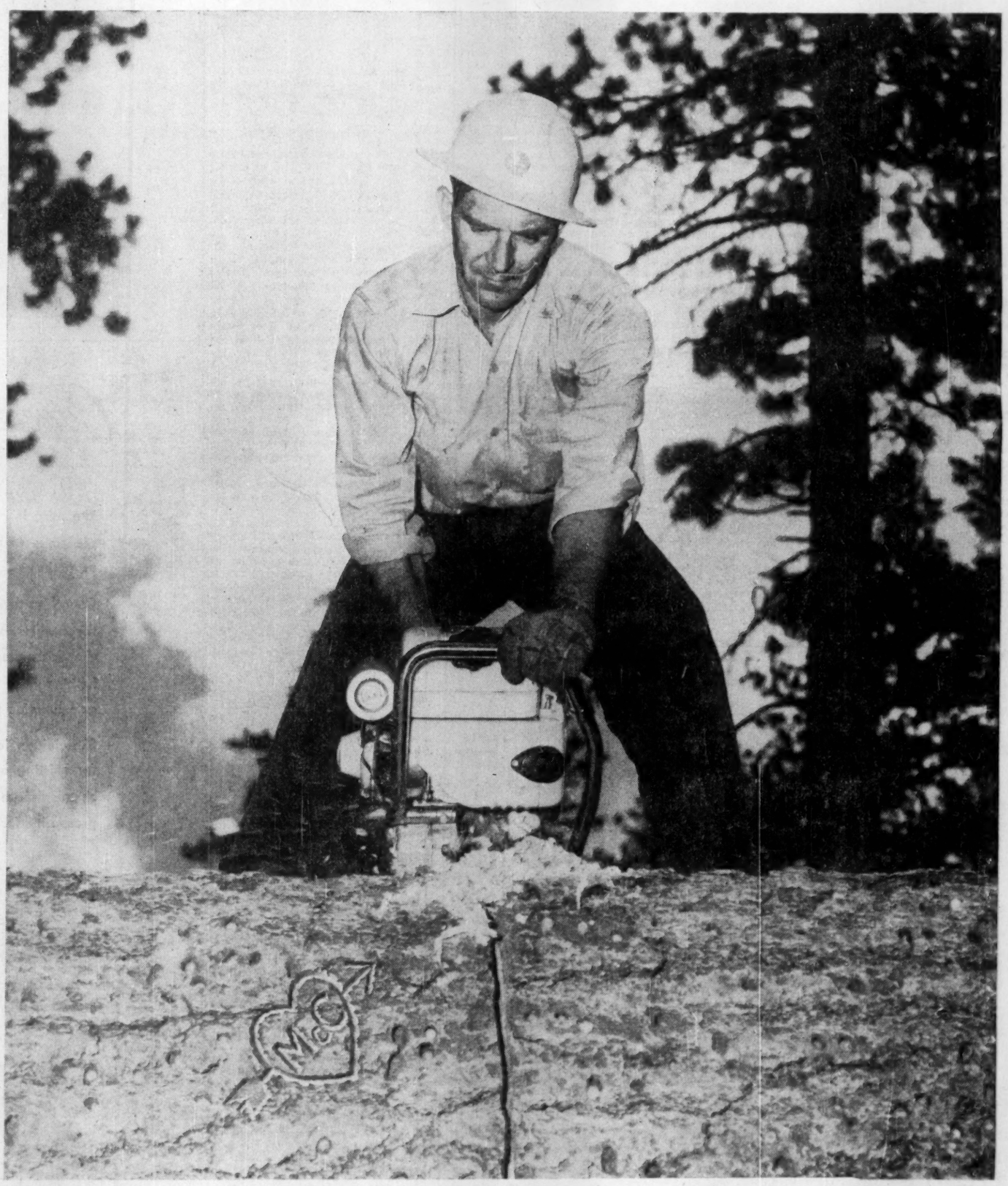
Directly or through its subsidiary, **the D. P. Power Co.**, the company owns water power on the Jacques Cartier River, having a present development of 12,000 hp and an ultimate capacity of about 46,000 hp.

(Continued on page 83)

DONOHUE BROTHERS
LIMITED

newsprint
groundwood pulp

MILLS
CLERMONT, CHARLEVOIX, QUE.
HEAD OFFICE
QUEBEC, QUE.



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Newsprint Companies Hum

(Continued from page 82)

Balance of power required for the mills is purchased according to an agreement with **Shawinigan Water and Power Co.**

Consolidated net profit of Donnacona Paper Co. for the year ended Dec. 31, 1955, increased to $1,822,659 against $1,243,995 in 1954.

Donohue Bros.

Donohue Brothers Ltd. owns and operates a pulp and paper mill at Clermont, Charlevoix County, Que. Present newsprint output is entirely sold under long-term contracts. The company's pulp and paper mill is on the Murray River at Clermont, some 90 miles east of Quebec City. Two newsprint machines are installed each capable of producing over 200 tons per day. Hydraulic power is obtained from the Murray River.

Company benefited from favorable newsprint market conditions in 1955 with operations at full capacity of the power available and complete disposal of production. It has an annual rated capacity of 70,000 tons of newsprint. Newsprint production in 1955 amounted to 71,599 tons against 69,509 tons in 1954.

Mechanical groundwood operations showed a material improvement with volume up by 32% from 8,875 tons in 1954 to 11,711 tons in 1955.

During the year $230,000 principal amount of first mortgage bonds was retired upon maturity and the balance of the 4½% serial bonds amounting to $250,000 were redeemed at par by anticipation. An additional series of 4% first mortgage bonds amounting to $1.3 million was issued and sold during the year and applied to redeem $250,000 of 4½% bonds and pay part of the cost of the acquisition of cutting rights on a 375-sq.-mile timber limit. Net balance at Dec. 31, 1955, amounted to $3,810,000.

Total replacement cost of fixed assets is estimated at $12,363,839 at Dec. 31, 1955, an excess of $9,569,000 over the depreciated book value at the same date.

For the six months ended June 30, 1955, Donohue and its wholly owned subsidiary companies showed reported estimated consolidated net profit of $498,169 against $427,841 for the like period of 1955.

At Dec. 31, 1955, working capital amounted to $4,364,872 compared with $3,980,675 at the same time the previous year.

Elk Falls

Elk Falls Co. produces newsprint exclusively at it Duncan Bay, Vancouver Island, mill. It is jointly owned by **Canadian Western Lumber Co.** and **Crown Zellerbach Canada Ltd.**, each owning 50% of its outstanding stock.

Canadian Western Lumber became a subsidiary of Canadian Crown Zellerbach as result of share exchange offer made this July (see Crown Zellerbach write-up). Formerly it had been a subsidiary of **Crown Zellerbach Corp.**, San Francisco.

Company sells production in Western Canada and to U.S. Crown Zellerbach, under long-term contract providing for a minimum 60,000 tons annually. Under a further long-term contract company will sell U.S. Crown Zellerbach 136,000 tons of kraft pulp, in noodle form, from its recently opened kraft mill.

The Elk Falls plant in 1955 produced 96,738 tons (80,289 tons a year earlier) of newsprint. It does not produce sulphite pulp but obtains a substantial amount of requirements from Crown Zellerbach Canada's Ocean Falls plant. Canadian Western supplies the bulk of wood requirements.

The original plant, which began production upon completion in June 1952, included a wood preparation unit, a groundwork pulp mill and a newsprint machine.

Elk Falls recently opened its new $15-million kraft pulp mill with an initial capacity of 400 tons daily. This is first phase of company's $28.5-million expansion program which it let contracts for in summer of 1955. Second phase will include installation of a second paper machine which will boost capacity to 500 tons. Machine will have an annual capacity of 60,000 tons of wrapping paper and newsprint.

In addition to the second paper machine, company has under construction a kraft bleach plant with a daily capacity of 175 tons, a 140-ton-per-day addition to groundwork capacity, and a sawmill with a capacity of 100,000 board feet of lumber per eight-hour shift. Sawmill will have chippers to handle waste and whole logs to provide chips for kraft mill. It is scheduled to start operation late this year.

These additions are expected to raise annual capacity by 60,000 tons of newsprint, 136,000 tons of kraft pulp for sale and 24 million board feet of lumber.

Consolidated net profit for the eight months ended Dec. 31, 1955, was $1,065,243, compared to net profit of $1,189,488 for the 12 months ended April 30, 1955. Company changed fiscal year end to calendar year.

Capitalization outstanding at March 31, 1956, included $1.5 million 3% first mortgage bonds Series A, due Dec. 15, 1956-58; $1.5 million 3½% first mortgage bonds Series A, due Dec. 15, 1959-61; $6.5 million 4½% first mortgage sinking fund bonds, due Dec. 15, 1970; $3 million 5% general mortgage bonds Series A, due Dec. 15, 1975; and 1,110,000 common shares, no par.

Great Lakes

Great Lakes Paper Co. manufactures newsprint and unbleached sulphite pulp at its plant on the Kaministiquia River, west of Fort William, Ont. It has full facilities for rail and water shipments.

Annual mill capacity is now 155,000 tons of newsprint and 60,000 tons of unbleached sulphite pulp. Two newsprint machines are installed.

Subsidiaries include **Superior Timber Co.**, a wholly owned nonoperating company, **Patricia Lumber Co.** operates a saw and tie mill and has valuable timber cutting rights under a long-term agreement with the Province of Ontario. The timber areas are adjacent to the areas held and operated by Great Lakes.

Two wholly owned U.S. subsidiaries, **Lake Superior Newsprint Co.** and **Canadian Wood Pulp Corp.**, were formed in 1955 to handle U.S. sales previously handled by an agency on commission basis. **Tyndara S.A.** was formed as a wholly owned subsidiary under Panamanian laws to facilitate reorganization of sales and service.

Newsprint sales for 1955 amounted to 155,000 tons (159,000 tons a year earlier) valued at $17.8 million ($18.3 million). Pulp sales amounted to 43,000 tons (20,000 tons) valued at $4.7 million ($2.1 million).

Company's present expansion will cost an estimated $34.5 million.

In late 1955 it began expansion program to raise Fort William mill's annual newsprint capacity by 90,000 tons through installation of a third paper machine, slated for operation by 1957. Early this year company commenced a second program to increase newsprint capacity by a further 110,000 tons annually through a fourth machine, to start operation by 1958. Two machines will boost newsprint capacity to about 360,000 tons annually.

Company will also build a new cellulose products mill at Fort William.

A $10-million issue of 5% sinking fund debentures, due May 1, 1976, was offered at par earlier this year. Proceeds will be used to help finance current expansion.

For first half of 1956 net profit was $1,607,118 ($1,634,426), down 1.7% and equal to $1.29 ($1.31) per common share. Lower profit was result of higher depreciation due to expansion.

Consolidated net profit for 1955 was $3,487,668, 11.9% higher than net profit of $3,116,444 for 1954. Earnings were equal to $34.88 ($31.16 in previous year) per Class B share and $2.81 ($2.43) per common share. Dividends amounted to $1.20 ($1.20) per B share and $1.60 ($1.60) per common share.

During 1955 the outstanding first mortgage sinking fund bonds were redeemed. In October an offering was made of $4 million serial and $11 million 4% first mortgage sinking fund bonds of which $9,316,000 sinking fund bonds were issued and balance fully subscribed for delivery by Jan. 15, 1957.

Capitalization outstanding at June 30, 1956, included $4 million Series A 4% first mortgage bonds, due Nov. 15, 1958-65; $11 million Series B 4% first mortgage bonds, due Nov. 15, 1975; $10 million 5% sinking fund debentures, due May 1, 1976; 100,000 Class B $1.20 cumulative preferred shares, no par; and 1.2 million common shares, no par.

James Maclaren

James Maclaren Co., a wholly owned subsidiary of **Maclaren Power & Paper Co.**, owns and operates the newsprint and lumbering division of the parent company. Company and its predecessors have been engaged in lumber business in vicinity of Buckingham, Que., since 1864.

The company's properties at latest available report include a groundwood mill at Buckingham. Que., with an annual capacity of 85,000 tons, newsprint mill at Masson, Que., with capacity of about 120,000 tons of newsprint per annum.

Newsprint production in 1955 totaled 125,423 tons compared with 119,734 tons in 1954. Mill operated 100% capacity last year.

Consolidated net profit was $3,603,403 which combines net profit of $3,034,533 for the paper company and $568,870 for the power company, **Maclaren-Quebec Power Co.**, another wholly owned subsidiary of Maclaren Power & Paper Co.

The new groundwood mill which went into production in April, 1952, with four magazine grinders now has ten units. Ultimate capacity is 12 magazine grinders.

Consolidated working capital at Dec. 31, 1955, amounted to $17,066,242 compared to $15,156,316 at the end of the previous year.

Mersey

Mersey Paper Co., now a member of the **Bowater Organization**, owns and operates a newsprint mill with necessary groundwood and sulphite equipment for the newsprint operation at Brooklyn, and at Liverpool Harbour, Nova Scotia.

In July this year, shareholders of the company approved the sale of company's assets to **Bowater Corp. of North America.** The company will continue to operate, as a wholly owned subsidiary of the Bowater Corp. of North America.

Current capacity is about 144,000 tons annually. A record 441 tons per day was produced last year. Company plans expenditures of $4.5 million to speed up two newsprint machines to increase output to about 165,000 tons annually.

Earlier, the estate of the late I. W. Killam informed minority shareholders that an offer made by the Bank of Montreal, on behalf of Canadian principal, to purchase holding of the estate at $230 per share had been accepted. The estate was reported to have held 155,000 of the 198,254 outstanding common shares.

The principal thus acquired over 75% of the stock. Directors of the company accepted the offer in respect to their own holdings and recommended its acceptance by other shareholders.

The purchaser then proposed to sell the assets of the company to **Scotian Paper Co.**, a new wholly owned subsidiary of Bowater Corp. of North America Ltd. This was later carried out.

Bowater plans to build a new groundwood pulp mill on the site with a capacity of 100,000 tons annually.

Practically the entire output of Mersey is sold to customers of long standing under contracts extending for varying periods up to the end of 1958. It markets its products in the Maritimes, the U.K., Australia, New Zealand and the U.S. Operations have been maintained at or above rate of capacity since the beginning of 1931 to the present. They are currently at slightly above 100% capacity, similar to 1954.

Company converted $512,373 undistributed income into $435,517 tax paid undistributed income by paying 15% tax of $76,856 in accordance with section 105 of Income Tax Act.

Mersey subsequently redeemed outstanding 5% cumulative redeemable prefered shares and created 70,000 new 5% cumulative preferred shares, $100 par. Mersey also redeemed $600,000 3½% series B bonds. It borrowed $3.3 million at 3½% on unsecured note of company which it replaced in February, 1956, by issue of $3.6 million 3¾% debentures, with $600,000 maturing annually 1957-62.

Working capital was reduced at Dec. 31, to $2,761,622 against $6,602,555 at same time last year. This was due to redemption of bond and preferred stock.

Capital expenditures for additions and replacements amounted to $880,819.

Further expenditures should enable further increases in machine speed and production to keep pace with growing newsprint demand, it was stated in the June annual report.

Consolidated net profit for year ended Dec. 31, 1955, amounted to $3,263,024 against $3,058,331.

Minn. & Ontario

Minnesota & Ontario Paper Co. produces and markets newsprint, specialty papers, kraft, insulating and building material, and other timber products in the U.S. and Canada. It also generates steam and hydro-electric power for use in its plants at International Falls, Minn., and Fort Frances and Kenora, Ont. In addition the National Pole and Treating Division operates plant facilities at Minneapolis; Minn., and Hillyard, Washington.

The markets served by the newsprint products of the company are mainly in the central portion of the United States, as are the markets for the pole, tie and wood treating products. For the other commodities handled by the company the markets are broader.

Company's paper and Insulite mills have a combined daily capacity of 1,418 tons, equal to 462,744 tons annually.

The mill at Kenora is completely integrated newsprint mill with a groundwood pulp mill and two paper machines, having an annual capacity of 113,000 tons of newsprint.

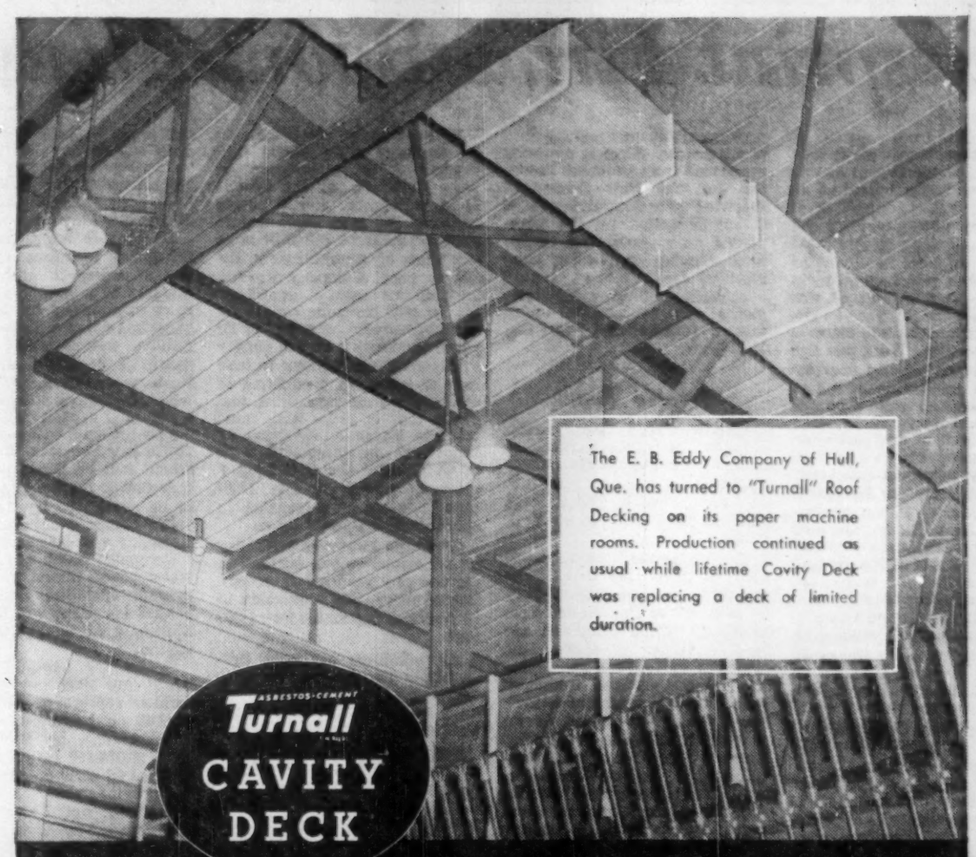
The Fort Frances mill has three paper machines with an annual capacity of 103,000 tons of newsprint and groundwood specialty papers.

The International Falls mill has three paper machines with an annual capacity of 66,000 tons of bleached kraft, sulphite and groundwood papers. Its four Insulite machines have an annual capacity of 450 million sq. ft. of insulation board.

Company believes it controls pulpwood sources adequate to supply its three mills' anticipated requirements in perpetuity. It has Crown concessions on 1,165,000 acres near the Fort Frances plant and 2,262,000 acres near the Kenora mill. In Minnesota it owns 258,000 acres and has cutting rights on a further 53,000 acres.

Capital expenditures in 1955 totaled approximately $11.2 million and brought expenditures in past decade to $52.9 million. Installation of a new 276-inch

(Continued on page 84)



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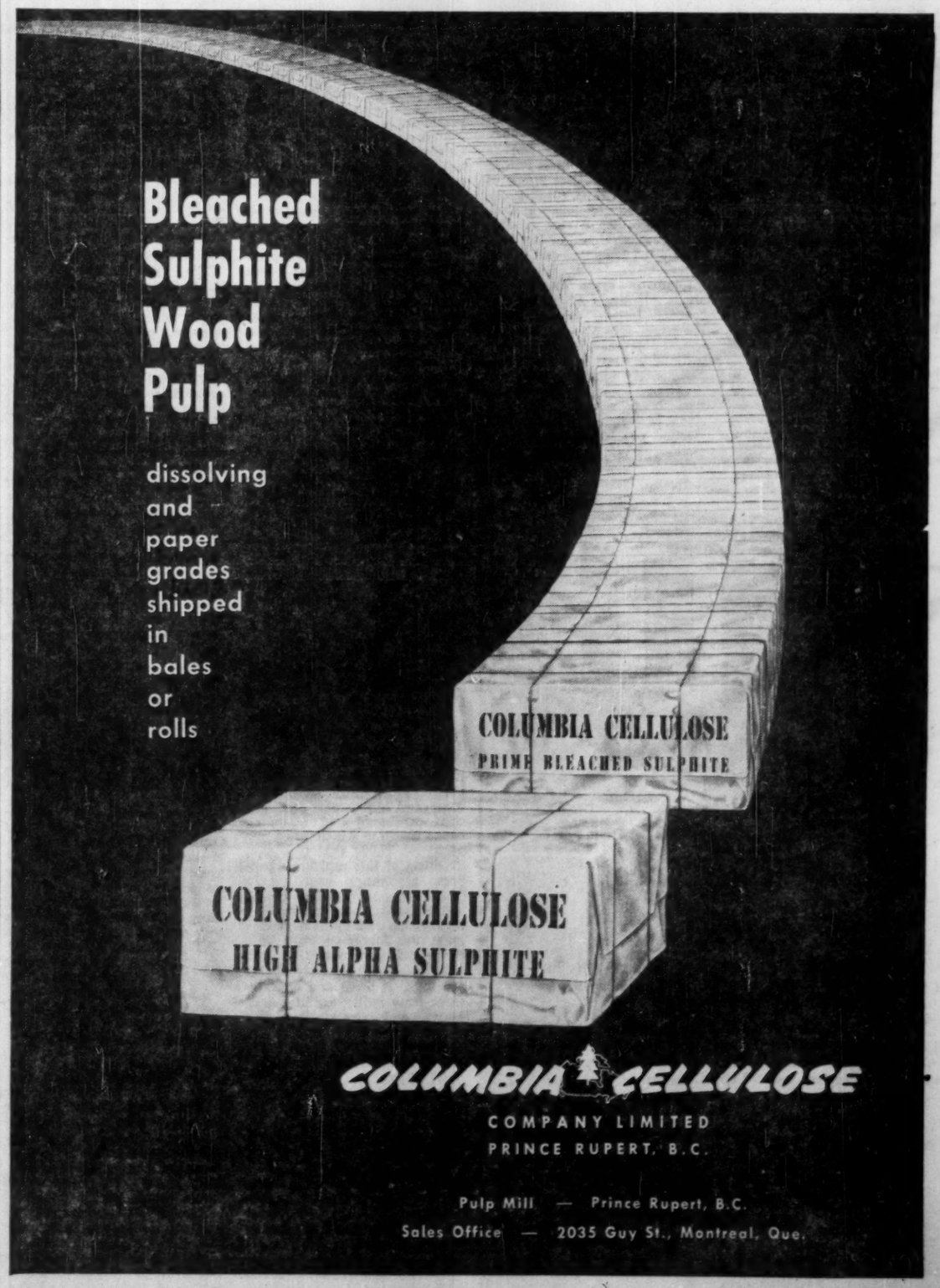

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Newsprint Firms Boom Along To New Records

(Continued from page 83)

newsprint machine is under way at Kenora plant. It will double output and begin operation in January, 1957. Supporting it will be new power, water, wood handling, sulphite, groundwood pulp and shipping facilities. At Fort Frances new vacuum pick-up and related equipment was installed earlier this year on No. 7 newsprint machine to increase capacity by 25%. Work was also carried out on a broad program to permit production of higher quality specialty papers on No. 5 and No. 6 machines.

In first half of this year company experienced strong demand, for newsprint, specialty papers, Insulite and treated wood products. Paper production at three mills, continued on a six-day basis, except for an 18-day shutdown of No. 7 paper machine in May for modernization and speedup. The International Falls Insulite mill operated on a seven-day schedule, although No. 1 machine was down 21 days for modernization in February. Two-year labor agreements were signed with the mill unions and all projects are on schedule, reported President Robert Faegre.

For first half of 1956 company showed a $4,140,695 ($2,862,024) consolidated net profit, a 44.7% gain. Earnings were equal to $1.61 ($1.11) per new common share.

Consolidated net profit for 1955 was $7,076,693, 16.6% higher than net profit of $6,067,570 for 1954. Earnings were equal to $5.50 ($4.72) per share and dividends, paid in U. S. funds, were $2.40 ($2.10). Dividends on the new $2.50 par common stock are being paid at $1.40 annually.

Consolidated net sales for 1955 amounted to a record $73.1 million ($70.1 million). Company achieved this despite fire at the Fort Frances groundwood mill, the transformer failure at Kenora and a 23-day strike at International Falls.

Production was 206,681 tons (193,139 tons) of newsprint, 95,634 tons (98,502 tons) of other paper grades, 12,435 tons (2,775 tons) excess pulp and 181,253 tons (186,389 tons) of insulation board, and $2,534,736 ($2,364,337) of poles, ties and treating.

In March, 1955, an issue of $14 million 3.30% sinking fund debentures, due 1957, was sold to retire some $6 million 4% promissory notes, due 1966, and to provide additional capital. Company also arranged a standby credit providing for loans up to $6 million by commercial banks up to Dec. 31, 1957.

Shareholders at a special meeting in February, 1956, approved a two-for-one split of common stock and a limited stock option plan for key employees.

Capitalization outstanding at June 30, 1956, included $14 million 3.30% sinking fund debentures, due March 1, 1975; and 2,689,086 common shares, $2.50 par.

N. B. International

New Brunswick International Paper Co. is a subsidiary of **Canadian International Paper Co.** and operates newsprint mill at Dalhousie, N.B., on Baie de Chaleur. The daily capacity of the four paper machines totals about 867 tons (268,000 tons annually on a 308-day basis). A wrapper machine has daily capacity of about 30 tons.

The mill is fully equipped to produce all its own regular pulp requirements. Electric power is purchased from **Gatineau Power Co.** and the **New Brunswick Electric Power Commission.** This is supplemented by the company's own generating equipment. Timber limits cover some 2,454,000 acres.

Financial and operating statements are consolidated with those of **International Paper Co.,** New York.

Ontario Paper

Ontario Paper Co., Thorold, Ont., and its wholly owned subsidiary, **Quebec North Shore Paper Co.** at Baie Comeau, Quebec, are owned by the Chicago Tribune and the New York News.

The Thorold mill produces 640 tons of newsprint daily. The company also operates pulp sales plants at Thorold and Baie Comeau, with a combined annual capacity of 60,000 tons which is sold on the open market. Ontario Paper Company also contracts with the **Beaver Co.** to take the output of its newsprint machine, supplying necessary raw materials such as pulpwood, sulphite, steam, etc.

Wood supplies for the Thorold mill are obtained from the company's timber limits at Shelter Bay, and Franquelin, Quebec; Heron Bay, Lake Superior; and Manitoulin Island. The Thorold plant also manufactures alcohol from waste sulphite liquor with an annual output of 700,000 gallons which is sold to a variety of Canadian manufacturers of commercial products ranging from anti-freeze to pharmaceuticals.

A vanillin plant with an annual output of approximately 500,000 pounds manufactures vanillin and several associated products including "Lioxin" from the lignin in the company's waste sulphite liquor. The plant has been in operation since 1952.

The company has recently added another byproduct "Aqualig" neutralized lignin sulfonic acid which is used as a roadbinder and dust retardant.

Ontario Paper also operates a fleet of 11 lake ships through its wholly owned subsidiary, **Quebec & Ontario Transportation Co.**

For Quebec North Shore see separate writeup in this section.

Powell River

Powell River Co. is the largest producer of newsprint on the west coast, a large producer of sulphite pulp, and through its subsidiaries manufactures lumber and other wood products. Through wholly owned subsidiaries company has complete control of its production from standing tree to finished product.

Company operates world's largest newsprint mill at Powell River, about 80 miles north of Vancouver on B. C. coast. Products are used principally in Canada, the United States, Alaska, Hawaii, Australia, New Zealand, the United Kingdom and in the Orient.

Company owns or controls about 700 acres of timber resources, largely located along the north coastal area and the Queen Charlotte Islands. Company also owns a 450-acre experimental forest at Powell River. A second experimental area is being developed for study of logging and other extraction problems.

Hydro-electric developments of company total 95,000 hp.; comprising an installation of some 53,000 hp. at the Powell Lake watershed, and a power house at the Lois River watershed adjacent to the mill with two units of approximately 21,000 hp. each. Company also has an auxiliary steam plant of 7,200 hp. In 1953 company completed an improvement program for its power facilities and can supply sufficient electric power to take care of increased production of 340,000 tons of newsprint and 45,000 tons of pulp, with some reserves. Early in 1955 company negotiated an agreement with B. C. Electric Co. to supply a block of power by late 1956; thus enabling an expansion in operations at Powell River.

Generally improved efficiency on all machines has resulted in regular new production records. Record newsprint production in 24 hours is approximately 1,300 tons.

All buildings are now substantially complete and installation of equipment is under way with completion scheduled for December.

Company says it is still studying proposal to erect a mill at Kitimat but many factors, including uncertainty as to **Aluminum Co.** having spare power and available markets, make construction start quite uncertain.

Capital expenditures in 1955 amounted to $9.1 million ($4.3 million). Number 9 newsprint machine should be operating by late 1956 and will increase capacity by 25%. Speed-up of No. 7 machine was completed early this year. A new office building is under construction at Powell River.

In October, 1955, following incorporation of Powell River and adjacent communities, company sold 75% of its homes and plans to dispose of townsite services and facilities.

Consolidated net profit for 1955 was $12,197,018, 8.3% higher than net profit of $11,258,311 for 1954. Earnings were equal to $2.90 ($2.68) per ordinary share and dividends amounted to $1.80 ($1.60) per share.

Net profit for first half of 1956 was $5,735,707, 2% lower than net profit of $5,852,378 for 1955's first half. Earnings per share were equal to $1.37 ($1.39). These results are subject to year end adjustment and include subsidiaries' profits for first five months only.

Newsprint earnings were down, despite price advance, due to higher costs. Lumber markets declined and bad weather curtailed logging operations. However, better returns from unbleached sulphite pulp partly offset these unfavorable factors, report Chairman H. S. Foley and President M. J. Foley.

Company has sold entire newsprint production for second half of this year and expects to sell all pulp tonnage available during balance of year. Lumber prices and demand are unsettled but it expects an improvement later in year.

First half of 1956 newsprint production was 196,641 tons (196,597 tons), unbleached sulphite pulp 17,637 tons (15,816 tons) other pulp and paper products 1,480 tons (1,296 tons), and lumber products 33,092,000 fbm (33,920,000 fbm).

Capitalization outstanding consists of 4.2 million ordinary shares, no par.

Price Bros.

Price Bros. & Co. manufactures standard and vacuum dried newsprint, novel news, and transfer paper; patent coated, pulp boards, food container, bottle cap, tag, ticket, screenings boards; rough and dressed spruce lumber; boards, industrial and crating lumber, and dimension stock.

Company owns and operates two newsprint mills, with necessary pulp manufacturing equipment, having a combined annual rated capacity of about 470,000 tons of newsprint.

The Kenogami Mill in Quebec has an annual capacity of 250,000 tons, while the River Bend mill, some 23 miles distant from Kenogami, has an annual capacity of 220,000 tons. The Kenogami Mill is also equipped with cardboard and wrapping paper machine which has a capacity of 17,000 tons per year. Products of this mill are wrappers, screenings board, pulp board, egg-case filler board, and imitation leather board.

Company also operates, under lease, the **Jonquiere Pulp Co.'s** cardboard and specialty mill with an annual capacity of 30,000 tons. It owns and operates three saw mills at Rimouski, Matane and Price which have a combined annual capacity of about 60 million feet, board measure, plus 30,000 tons of sulphite chips.

Equipment for dewatering and burning bark is being installed at company's Kenogami Mill to generate steam and salvage waste material.

In 1955 Rimouski and Price sawmills made normal log cuts, but the Matane sawmill operated at reduced capacity. At the Jonquiere board mill, a shortage of orders again resulted in the loss of some operating time.

Both of company's newsprint mills operated at capacity during the year resulting in the shipment of 505,516 tons of pulp and paper products as compared with 488,735 in the previous year. Lumber shipments at 62,152,000 board feet in 1955 compare with 47,285,000 board feet in the previous year.

To provide additional power for future increases in production of newsprint and to offset the loss of a small power contract terminating in 1957, company has decided to build a $10 million power plant at the mouth of the Shipshaw River in Northeastern Quebec. The plant, which includes a dam, will have a potential capacity of 50,000 to 60,000 hp. and will replace the 10,000 hp. Murdock Falls plant which will be demolished. The new power project is scheduled to be completed by the end of 1957. Company reports no new financing will be necessary.

Company owns and operates water power plants with an aggregate installed capacity of 150,200 hp. They are located at Shipshaw, Au Sable, Chicoutimi, Rimouski.

Company's consolidated net profit for 1955 was $9,172,873 (which represents earnings of $183.46 on preferred and $4.09 on common), up substantially from $8,075,890 ($161.52 on preferred and $3.59 on common) in the previous year.

Working capital as at Dec. 31, 1955, was $44,072,702 as compared with $39,123,279 a year earlier.

Earlier this year company reported that its earnings for the first quarter of 1956 were ahead of those in the corresponding period of 1955, and this situation was expected to continue throughout the entire year.

Que. North Shore

The Quebec North Shore Paper Co., a wholly owned subsidiary of the **Ontario Paper Co.,** operates a modern newsprint mill at Baie Comeau, Quebec. The mill, brought into production in 1938, was the first major industrial enterprise on the lower St. Lawrence North Shore and required complete townsite, mill, power, and woods developments.

The Baie Comeau mill has two newsprint machines both fitted with modern vacuum pickup equipment. Annual newsprint capacity is in excess of 165,000 tons. A pulp sales plant of 40,000 tons annual capacity producing both sulphite and groundwood pulps is also a part of the Baie Comeau operations. Wood supplies are provided by the extensive timber limits at Baie Comeau. The entire paper output is contracted for by the New York Daily News and the Chicago Tribune.

The company operates a power plant on the Outardes River with an installed capacity of 70,000 hp. and supplies the company's power requirements and also lighting and power facilities for the town of Baie Comeau. The company's properties in the townsite are operated by the Baie Comeau Company, a subsidiary of Quebec North Shore Paper Co.

The Quebec North Shore Paper Co., through an exchange of interests, is at present engaged with the **British Aluminium Co.** through the newly formed **Canadian British Aluminium Co.** in a $150 million primary aluminum-smelting project at Baie Comeau. British Aluminium owns 60%, Quebec North Shore 40%. First unit of the smelter, which will have an annual capacity of 80,000 tons in its first phase, is scheduled to start operating at the end of 1957.

Manicouagan Power Company, a subsidiary of the Quebec North Shore Paper Company, operates a two-generator 90,000 hp. hydro-electric power development at the 1st Falls of the Manicouagan River. This power is used to supplement mill and town electrical power requirements and to supply the communities and industries which are growing up on the North Shore as a natural result of the development of the area by the company at Baie Comeau. Part of this power is transmitted by submarine cable across the Gulf of St. Lawrence to Gaspe Peninsula for mining developments in that area.

In association with the new aluminum-smelting project of Canadian British Aluminium, Manicouagan Power Co. is at present engaged in expanding its power development at the 1st Falls through the addition of three 50,000 hp. generators at a cost estimated at $14.2 million (F. P., Sept. 1). Canadian British Aluminium has purchased a 40% interest in the power firm.

Financial and operating statements are not issued for publication as there is no public interest in the company.

Spruce Falls

Spruce Falls Power & Paper Co. operates a newsprint mill at Kapuskasing, Ont. **Kimberly-Clark Corp.,** Neenah, Wis., owns 50.12% of the outstanding common stock. The New York Times, which purchases largest portion of its newsprint requirements from Spruce Falls, owns the minority common share interest. Bulk of the remaining newsprint production is sold to publishers of several newspapers including the Philadelphia Inquirer and the Washington Star.

The Spruce Falls plant comprises a newsprint mill containing four paper machines, a mechanical pulp mill with capacity adequate for the paper mill's requirements, and a chemical pulp mill with sufficient capacity to supply the newsprint mill and the pulp requirements of **Kimberly-Clark Corp of Canada.** Plant can also supply parent company with current sulphite pulp requirements of its U. S. mills, over and above its own productive capacity.

Company plans to boost annual newsprint capacity by about 39,000 tons in next four years from present 242,700 tons. It will do this through speeding up two of its four paper machines to raise output to 255,700 tons by 1957, 278,700 tons by 1958 and then to 281,700 tons by 1959.

Sales for 1955 amounted to 245,229 tons (236,751 tons a year earlier) of newsprint and 66,169 tons (65,134 tons) of pulp. Net sales amounted to $33,605,000 ($32,115,000).

Net profit was 23.8% higher at $5,151,000 ($4,162,000). Company paid $1,775,839 ($1,473,673) in dividends to parent. Improvement in exchange rate accounted for about half of increase in profit, as practically all sales are made in U. S. dollars. Two $5 hikes in pulp prices and a $4 per ton rise in paper prices tended to offset higher labor and raw material costs. Kimberly-Clark's equity in net earnings was $2,218,213 ($2,075,983).

Operations for the first four months of current year showed about a 10% improvement over corresponding period last year, and the world newsprint shortage ensures full output for present year, said the parent company.

Investment in Spruce Falls was carried on parent company books at year end at $2,079,501 (same) and equity in net assets was $12,737,158 ($12,202,304).

Richmond

Richmond Pulp & Paper Co. of Canada Ltd., which produces newsprint as well as groundwood and semichemical pulp, is a unit of the **Kruger** organization of Montreal. Company's mill is situated at Brompton-ville, Que.

A $5 million expansion program bringing mill capacity to 75,000 tons of newsprint a year was completed last year. This was the major portion of a long-

(Continued on page 85)

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Joliette Steel Division works under contract agreements with manufacturers of heavy equipment, from original drawings. This assurance of "made-to-measure" parts, with Joliette warranted quality ensures complete satisfaction.

JST-8

These Paper Board and Specialty Companies Are Rolling Along On Crest Of Industry Boom

Abitibi

Abitibi Power & Paper Co., in addition to newsprint, sulphite pulp, etc., also makes paperboard, wrapping paper and many other items.

Corrugated board is produced at company's Sturgeon Falls, Ont., mill while the Iroquois Falls mill also manufactures wrapping paper. Capacity of these mills is 36,960 tons and 13,860 tons per annum respectively.

Production of paperboard in 1955 amounted to 56,679 tons (43,484 tons in previous year).

For the main report on Abitibi see the newsprint section.

Anglo-Canadian

Anglo-Canadian Pulp and Paper Mills Ltd. produces paperboard and wrapper.

The board machine, installed in 1950, produces about 75 tons per day or 20,000 tons per year. Entire board production is sold to Canadian manufacturers of boxes and other packaging materials.

Production of paperboard in 1955 amounted to 20,566 tons against 20,272 tons for 1954.

For main writeup on this company see newsprint section.

Bathurst

Bathurst Power & Paper Co. through its mills division manufactures and sells paperboard and pulp products, principally folding and set-up boxboards, kraft linerboards, BCM (Bathurst corrugated material) and unbleached sulphite pulp. Through its container division the company also produces and markets corrugated boxes and allied products, wirebound and wood boxes and crates and allied products.

The mills operated by the company are located at Bathurst, N.B. Corrugated boxes and allied products exclusively are manufactured in plants located in Hamilton, Ont., Whitby, Ont., and at St. Laurent, Que. Both corrugated boxes and wirebound and wood boxes and allied products are manufactured in the plants in Montreal, Que.

The container division correlates the operations of the three subsidiary companies manufacturing shipping containers. **Canadian Wirebound Boxes, Ltd., Kraft Containers Ltd.,** and **Shipping Containers Ltd.** The formation of this division integrated under one department all the activities of the company in the container field. All shipping containers manufactured within the container division are being marketed under the name Bathurst Containers.

The rated annual capacity of the mills division is approximately 33,000 tons of boxboards, 125,000 tons of kraft linerboards and BCM, and 24,000 tons of unbleached sulphite pulp. The rated annual capacity of the container division is 2,000,000,000 square feet of corrugated board and 14,000,000 board feet of lumber and veneer conversion into wirebound boxes.

In 1955 the mills established a new record for total production amounting to 152,250 tons. Production of container boards and boxboards for the year was the highest on record, and represented an increase of 3,276 tons and 1,503 tons, respectively, when compared with the production of these products in 1954. Market pulp production of 19,024 tons was slightly lower in 1955 than for the previous year.

The company's output of boxboards, kraft linerboard and corrugating board is sold principally in the domestic market and for export to the U. K. and Australasia. A substantial portion of the kraft linerboard and corrugating board production is used by the five converting plants within the container division. Unbleached sulphite pulp is exported mainly to the United States.

The company and its wholly owned subsidiary, **Cascapedia Manufacturing and Trading Co.,** hold under crown licenses from the governments of the provinces of New Brunswick and Quebec a total of approximately 2,700 square miles of timber limits estimated to supply the wood requirements of the existing mills in perpetuity.

The company also operates a hydro-electric plant at Great Falls on the Nepisiquit River in N. B. with an installed capacity of about 14,000 hp. Other power sites on the same river, estimated to be capable of developing approximately 40,000 hp, are held or controlled by the company. The company has installed at its mills' site steam generator capacity having a rating of about 23,000 hp.

As of Aug. 1, 1956, **New Brunswick Electric Power Commission** acquired from **Bathurst Power & Paper Co.** the subsidiary company, **Bathurst Electric and Water Power Co.** This company retailed power to households, stores and shops within the community of Bathurst. Power for this purpose was supplied by the parent company. It is the intention of the New Brunswick Electric Power Commission to supply, in the near future, the power necessary for these services from its own power plants located at various points within the Province of New Brunswick. All power produced from the hydro-electric and steam generating power plants owned and operated by Bathurst Power & Paper will then be available for the manufacturing operations of the company.

Consolidated net sales in 1955 amounted to $37,099,887 ($27,440,060 in '54), a new record in both the volume and value of sales. Consolidated net profit for the year was $3,154,918 ($2,962,283 in 1954). The cost to the company of doing business in all of its various operations rose substantially in 1955 as a result of increased cost of materials and supplies; higher wages and salaries; increased cost of forest protection; and additional expense incurred through the necessity for more extensive and aggressive advertising programs, the annual report said.

At the end of the year inventories of finished goods on hand were lower than at December 31, 1954.

Basic selling prices of container boards and boxboards and of the products marketed by the container division were steady. The outlook for the company was described as anticipating that the volume of business carried on by the company in 1956 should closely parallel the trend of general business conditions but stressed that the high cost to the company of doing business would likely continue throughout the year. For the first six months of 1956 estimated net profit at $1,534,310 was up approximately 8.5% from $1,413,587 for the same period in 1955.

The company recently announced that through improvements presently being undertaken to its BCM mill the annual output of BCM will be increased by 15,000 tons. Other important improvements being undertaken within the Mills Division include the installation of a new ultra-modern black liquor recovery unit and brown stock washing equipment for the kraft pulp mill, a new 5,000-kw turbo-generator for the steam power plant, an extension to the finishing room and train shed and the installation of two new hydrapulpers. Additional conversion equipment for the manufacture of shipping containers will also be installed.

This additional conversion equipment will be for Montreal, St. Laurent, Toronto, Hamilton and Whitby plants and will increase the capacity of the Container Division to produce corrugated boxes and allied products.

Canada Paper

Canada Paper Co. is a wholly owned subsidiary of **Howard Smith Paper Mills Ltd.** and production includes newsprint, kraft, wrapping, bedding, rotogravure, envelope papers, box cover papers, paper bags, and a range of converted products including creped and crinkled papers, towels, waterproof building and wrapping papers and many specialties.

Its plant at Windsor Mills on the St. Francis River in Quebec includes a kraft pulp mill, a two-machine paper mill and a converting plant.

The St. Francis Mill, about one-half mile up the river from Windsor Mills, has three paper machines.

Annual capacity of company plants are consolidated with Howard Smith, but in 1955 they had capacities of 56,000 tons of kraft, wrapping, book and specialty papers; 90,000 tons of kraft pulp; 10,000 tons of groundwood pulp; 350 million paper bags.

Its subsidiaries include **Schofield Paper Co., N. B.,** operating a wholesale warehouse in Saint John and one in Halifax, dealing in high-grade papers, wrapping, twine, newsprint, ruled forms, toilet papers, bags, etc.; **Canada Paper "Wholesale" Ltd.** operating wholesale warehouses in Toronto and Montreal and merchandising chiefly book, bond and writing papers; **Kilgour's Ltd.** operates wholesale warehouses in Montreal, Toronto, Hamilton, London, Ottawa and Winnipeg, selling bags, wrapping paper, twine, paper, paper boxes, etc. It also has warehouses in Fort William, Regina, Saskatoon and Edmonton.

Current expansion program at Windsor Mills has been under way for several years and most of the major projects will have been completed in 1955 and 1956. The new No. 6 paper machine came into operation in May, 1955, producing news grades for which there is an exceptionally strong market. The new steam plant also started up last year and supplies requirements of the paper machine and other parts of the mills with low operating cost.

Projects under way or planned for early 1956 completion reported in annual statement included a new precipitator for the recovery furnace to improve efficiency of chemical recovery and to reduce the objectionable atmospheric conditions associated with manufacture of kraft pulp. An extension of the kraft pulp digester building to eventually house two new digestors.

Installation of a modern polyethylene extruder coater in the converted paper products division has been completed.

Financial and operating statistics are consolidated with those of Howard Smith Paper Mills Ltd. (see fine paper section).

Cdn. International

With the acquisition from **Brown Corp.** in Dec. 1954 of a large mill in La Tuque, Que., **Canadian International Paper Co.** entered the kraft pulp field.

Following completion in March, 1956, of a $20 million expansion program at La Tuque, including installation of a 276 in. machine, the mill now produces kraft paper and board and has an over-all rated capacity of 975 tons per day (unbleached basis). Present production is 525 tons per day of bleached pulp, 375 tons per day of board and paper and 200 gallons of turpentine. Equipment consists of two Minton driers, two Sherbrooke driers, three hydraulic machinery driers and the board and paper machine.

Wood for La Tuque is obtained from nearly 5,000 square miles of woodlands in the Upper St. Maurice Valley, part of which are freehold, the balance being harvested on a lease arrangement with the Provincial Government. Power is obtained from the **Shawinigan Water and Power Co.**

Cdn. Glassine

Canadian Glassine Ltd. manufactures glassine and greaseproof papers, both in plain and laminated form, at its Limoilou plant near Quebec City.

Company was established three years ago and is 70% owned by the **Deerfield Glassine Co.,** Monroe Bridge, Mass., and 25% owned by **Anglo-Canadian Pulp & Paper Mills Ltd.** The remaining 5% interest is privately held.

Company's current production of both glassine and greaseproof papers is in the vicinity of 14 to 16 tons daily. At present, a $300,000 expansion and improvement program is under way calling for increased floor space for finishing operations and the construction, within the next six months, of an additional building. The company is also installing a deculator, a relatively new innovation which removes air from stock and water being used in the manufacturing process.

Further major expansions are currently in the planning stage.

Company reports its operations, from a financial standpoint, were successful in 1955 and that so far this year even better results are in prospect. Financial statements are not available for publication.

Company's products are handled exclusively by Acer McLernon Inc., Montreal.

Cdn. Wallpaper

Canadian Wallpaper Manufacturers Ltd., together with its subsidiaries, is the largest manufacturer of its type of products in Canada. Trade names are Waterfast, Durawall, Permaplast, Sunworthy, and Semi-Trimmed.

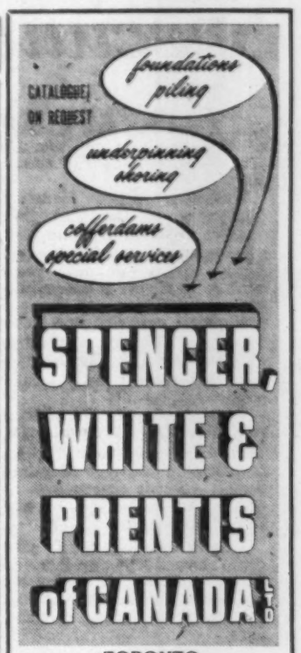
Plants are situated in New Toronto and Leaside, Ont.

Company has two wholly owned subsidiaries. **Empire Wall Papers Ltd.,** acts as a sales outlet for the products of the parent company with wholesale and retail stores in Toronto (2), Montreal, Winnipeg, Regina, Calgary, Saint John, N.B., Ottawa, London, Ont., Hamilton and Kitchener, Ont.

Dominion Colour Corp. was formerly the color department of the parent company and was converted into a separate entity 1946-47.

Consolidated net profit for the year ended April 30, 1956, was $225,294 ($299,559 net loss in previous year). Earnings on both Class A and Class B stock were equal to $1.74 ($2.32 deficit) per share and dividends amounted to 40c (nil) per share. Company

(Continued on page 86)



Newsprint Firms Boom Along

(Continued from page 84)

range program of expansion and improvement begun in 1950 and which included additions to existing buildings to house a second newsprint machine, new electric grinder equipment and a new semichemical pulp plant.

Another plant extension providing additional 10,000 sq. ft. of floor space is now nearing completion, and will house five more grinders which in turn will increase company's groundwood production by about 60%. Cost of this expansion is estimated at $1,500,000. When completed the new addition to the groundwood mill will enable company to produce all of its own groundwood requirements.

Existing newsprint machines will also be speeded up under the program, which should substantially increase company's production this year.

Both shipping and materials handling equipment throughout the mill have been modernized, new diesel equipment has been acquired, and railroad sidings and platforms extended. Accounting and mill administration offices have also been modernized and streamlined.

Company recently acquired a renewable cutting license on 300 sq. miles of crown lands, located along the Chibougamau railway in northern Abitibi, assuring company of a continuous wood supply adequate to maintain its rapidly growing production.

In addition to the Richmond Pulp & Paper Co. of Canada Ltd. the remaining four companies which make up the five-member Kruger organization are: **Kruger Paper Co. Ltd.,** Montreal, fine-paper wholesalers; **Sherbrooke Paper Products Ltd.,** Sherbrooke, Que., manufacturers of corrugated boxes; **Aluminum Extruders Ltd.,** St. Therese, Que., and **G. O. Nesbitt Co.,** Vancouver, B.C.

The Richmond company pioneered the first successful commercially operated semichemical pulp mill utilizing local hardwoods for the manufacture of newsprint.

Financial and operating figures are not published since there is no direct public investment interest in the company.

St. Lawrence Corp.

St. Lawrence Corp. manufactures newsprint as well as kraft fibre and specialty papers, boxboards, shipping case materials, unbleached sulphite, kraft and groundwood pulps.

Company owns and operates five mills, of which three are in Quebec, at Trois Rivieres, Dolbeau and East Angus and two are in Ontario at Red Rock and Nipigon. These mills have a combined annual saleable capacity of about 642,700 tons of pulp and paper products.

Total capacity of newsprint mills includes 211,425 tons at Trois Rivieres, 111,725 tons at Dolbeau and 57,550 tons at Red Rock. Sale of newsprint paper last year amounted to 382,738 tons against 329,997 tons in a like 1954 period. In the first three months of 1956, company sold 97,012 tons. Timber limits held by company under conditional leases, licenses and rights from the provincial governments, together with approximate 140 sq. miles in freehold and the equivalent of about 54 sq. miles held in freehold by a wholly owned subsidiary have an aggregate area of about 9,091 sq. miles. This area is estimated to contain at least 53,600,000 cunits of pulpwood. Cunit represents 100 cu. ft. of solid wood.

Company spent $37 million between 1951 and 1955 inclusive on capital account on mill plant and equipment, timber limits, woodland improvements and equipment to the five mills. Additions and improvements to capital assets have improved efficiency in operations, achieved a greater concentration of productive capacity in the manufacture of finished products and have increased annual saleable capacity of pulp and paper products from approximately 530,675 tons in 1951 to about 642,700 tons at present.

Principal market for company's output of newsprint is in U. S. although part of the output is sold overseas and in domestic markets. Practically all of its kraft product are sold in Canada. Its surplus pulps are sold in Canada, the U. S. and overseas. In October, 1955, company started a program for modernization and speed-up of plant and equipment at the Trois Rivieres and Dolbeau mills, involving expenditures estimated at $9.4 million, which is scheduled for completion in 1958. Purpose is to increase operating efficiency of these mills and to expand annual saleable capacity of newsprint by 18,500 tons at Trois Rivieres and 21,500 tons at Dolbeau. Upon completion of the program, total annual saleable capacity of pulp and paper products will approximate 682,700 tons.

Based on results realized in the first quarter of 1956 and on prospects for the balance of the year, it is estimated annual sales and earnings will exceed 1955. Net profit in the first six months of this year amounted to $4,084,840 against net of $2,636,338 for the like period of 1955. Net sales of pulp and paper products in this period amounted to $39,641,776 against $33,672,894 the previous year. Contracts for supply of newsprint in 1956 fully take up expanded capacity and maximum possible output. Company has announced that it purchased a block of 154,324 common shares of **Price Brothers & Co.** last January. The stock was bought from the estate of the late I. W. Killam, at approximately $51 per share or a total of $7,875,154. Additional Price Brothers shares have since been acquired.

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For shipments to the four corners of the earth — or to the four corners of your own town — Bathurst offers you a complete line of corrugated containers and wirebound boxes.

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56-11

FROM FOREST BATHURST TO PACKAGE

POWER & PAPER COMPANY LIMITED

PULP AND PAPERBOARD MILLS AT BATHURST, N.B. CONTAINER PLANTS AT: HAMILTON, ONT. TORONTO, ONT. WHITBY, ONT. ST-LAURENT, QUE. MONTREAL, QUE.

Specialty Firms Hum Along

(Continued from page 85)

paid a first and final dividend of 40c per share on Aug. 27, 1956, to shareholders of record Aug. 13.

Wallpaper sales, including first year of Canadian line, showed expected increase over previous year but still did not reach volume of two years earlier. Company is concentrating on narrowing gap between production capacity and sales volume. However, exchange difficulties and import restrictions have closed many former export markets.

Company is now introducing new Canadian lines each year, instead of on a two year basis. It is issuing two new selections during current season and an entirely new selection of prepasted papers.

Empire Wall Papers' sales again showed a modest increase. However, improved trading has not been sufficient to produce profitable operation, company says.

Dominion Colour showed a slight profit contrasted to loss in previous year. Dominion is undertaking further expansion in the pigments field. Sales of dry colors are substantially higher. Company is confident of future despite stronger competition from both domestic and foreign manufacturers.

Capitalization outstanding at April 30, 1956, included $140,000 4% serial debentures, due 1957-60; 25,673 Class A shares, no par; and 103,573 Class B shares, no par.

Consolidated Paper

Consolidated Paper Corp. is an important producer of kraft paper and board and wrapping paper besides its newsprint and pulp operations.

Daily rated capacity of its Laurentide division, Grand' Mere, Que., and Wayagamack division, Trois Rivieres, Que., amount to 57 tons board and wrapper, and 186 tons of kraft paper. Annual capacity is 57,200 tons of kraft wrapper and 17,556 tons of board and wrapper.

Its kraft paper is sold under the trade name of "Wayagamack Pure Kraft." It supplies such products as kraft paper in brown, white and colors, used for wrapping and converting purposes. A considerable tonnage is used in the manufacture of multiwall paper sacks for cement and other rock products, flour, sugar, chemicals and fertilizers.

Tissue papers, white and colored for wrapping, creping, waxing, twisting and foil backing, etc. The company's cardboard is sold under the trade name of "Laurentide Board," and is used in the manufacture of cardboard boxes, composition, wall boards and as a mounting board for displays and many other purposes.

Consolidated net profit of the company for the six months ended June 30, 1956, totaled $7,852,962 against $6,798,352 for the like period of 1955.

The company's 1955 pulp and paper production sold amounted to 822,950 tons against 833,848 tons the previous year.

For the main writeup on this company see the newsprint section.

Dom. Cellulose

Dominion Cellulose Ltd., Toronto, and its associated company, National Cellulose of Canada Ltd., manufactures face-cleansing tissues under the brand names of "Face-Elle" and "Gibsons." It also makes "Nancy" brand toilet tissue, and miscellaneous sanitary paper products.

Dom. Envelope

Dominion Envelope Co., Toronto, manufactures envelopes, specialty bags, and converts Cellophane into bags, rolls and sheets. It has a complete packaging service. Production is around 550 million envelopes and commodity bags yearly.

Company opened its new 115,000 sq. ft. plant on a 12-acre site in Toronto last October. Plant employs about 140 people and is said to be country's largest printed envelope factory contained on one floor.

Several new envelope manufacturing machines were designed specially for the new plant and operate on a straight line flow that reduces manufacturing time and cuts costs.

Design and internal layout was done by Dominion employees who, through their auxiliary management group, also advise company on capital expenditures, production, sales problems, etc.

Dryden Paper

Dryden Paper Co. manufactures kraft pulp and kraft paper products consisting of wrapping papers, bag papers, gumming, envelope, waxing, car liners, waxed kraft, building papers, liner board and corrugating medium.

It holds interests in **Woods-Dryden Paper Bags Ltd.**, Winnipeg, and in the **Ormiston Mining and Smelting Co.**, a new salt cake producing company at Ormiston, Sask.

Company's markets for its paper products is chiefly in Western Canada. Surplus pulp is sold in the U. S.

Company's pulp and paper mill at Dryden, Ont., has an annual capacity of about 72,000 tons of kraft pulp. Of this amount some 49,500 tons currently can be converted into finished kraft paper and kraft paper products. Balance of the tonnage is at present sold as an unbleached kraft pulp in the U. S.

Expansion is under way to increase mill capacity to 92,000 tons of bleached and unbleached kraft pulp, and 50,000 tons of kraft paper products. Program is scheduled to be completed by about July 1, 1958. It includes a bleach plant of 92,000 tons annual capacity.

Upon completion of the present new development program about 270,000 rough cords of pulpwood will be consumed annually by the mill.

Timber limits comprise a total area of about 6,600 sq. miles. Aerial and ground surveys over 2,821 sq. miles held under 21-year lease from the Ontario Government indicate a pulpwood stand of nine million cords of jackpine and spruce. The remaining area — held under license from Ontario—is estimated to contain about 15 millions of jackpine and spruce.

Dryden is a subsidiary of **Anglo-Canadian Pulp and Paper Mills Ltd.** Parent showed Dryden mill produced 46,909 tons of kraft paper and board as well as 22,116 tons of unbleached kraft last year. Total output of 69,025 tons compared with 70,715 tons for 1954.

Outstanding capitalization of Dryden consists of $3.5 millions in debentures; 215,000 npv common shares.

Capital expenditures in year were $3,510,220 of which $2,995,678 was spent on new development program.

Net profit for year was $850,926 ($864,830). Working capital at Dec. 31, 1955, was $5,518,227 up $674,305.

Annual report said capacity operations were indicated this year.

E. B. Eddy

E. B. Eddy Co., founded in 1851, manufactures and distributes a wide range of products including printing and converting papers, household products, grocery bags, industrial products, as well as being a substantial newsprint and paperboard producer.

Sales names under which products are sold include "Cheneaux Bond," "Multiscrip Duplicating," "Wellington Offset," "Express Writing Manilla," "Ancaster Book," "Post Card," "Tecumseh," "Mohawk," "Bristols," "Guardian Index Bristol," "Lighthouse Wove Envelope," "C" tag, "X" tag Manilla, "Niagara Litho," "Multicopy Wove Duplicating," "Dalhousie Ledger," "White Swan," and "Onliwon" towels and toilet tissues.

Sales in all product groups were substantially higher in 1955 than in the previous year, in both physical volume and dollar sales. Shipments exceeded all previous records but although the level of economic activity is high throughout the nation, market conditions continued very competitive with the accent placed on quality and service.

Basic improvements were made in several of the paper machines of the E. B. Eddy Co. and the subsequent increased output quickly compensated for business lost during the short temporary shut-down required to make these improvements. Increased machine speed and improvement in product quality, coupled with heavy demand for its products, resulted in forecast for significant sales increase in 1956, company reported.

Further details on this company are in the fine paper section of this issue.

Fraser Cos.

Fraser Cos. directly or through its subsidiaries, **Fraser Paper Ltd. and Restigouche Co.** manufactures sulphite and groundwood specialty papers, chemical wood pulps, groundwood pulp, paperboard and lumber. The company operates sulphite and groundwood pulp mills, sulphite and kraft bleaching plants, and a paperboard mill at Edmundston, N.B.; an unbleached kraft pulp mill at Newcastle, N.B., and sawmills and dressing mills at Cabano, Que., and Plaster Rock, N.B.

On a subsidiary, **Fraser Paper Ltd.** operates paper mill manufacturing high grade specialty papers from chemical and groundwood pulps at Madawaska, Maine.

Another subsidiary, **Restigouche Co.** manufactures paper grade and dissolving grade bleached sulphite pulp in its mill at Atholville, N.B.

Capital expenditures during 1955 amounted to $4,174,830 against $2,416,128 in 1954.

Consolidated net profit for the year was $5,710,785 compared with $4,868,171 for the preceding year. In the first six months of 1956 consolidated net was $3,388,077 against $2,383,894 in like period of 1955.

Pulp, paper and paperboard products sold by the company increased to 273,169 tons against 253,668 for the previous year. Shipments of company products in 1955 were the highest in its history. The recent program of modernization and improvement to plant and equipment was the principal factor in establishing this record.

Interlake Tissue

Interlake Tissue Mills Co. manufactures a wide range of paper specialty products at its Merritton, Ont., plant. These include paper napkins, towels and allied products. Plant and equipment improvement carried on in recent years has enabled company to increase production substantially above its former level of 10,000 tons a year.

Interlake is privately owned and does not publish details of its financial resources. Capitalization stands at $625,000 in shares of $100 par value.

Kimberly-Clark

Kimberly-Clark Corp. of Canada, a wholly owned subsidiary of **Kimberly-Clark Corp.**, Neenah, Wis., operates a cellulose wadding plant on the Kapuskasing River in Northern Ontario.

Kimberly-Clark Products Ltd. (formerly **Canadian Cellucotton Co.**) has a plant in Niagara Falls, Ont., and another at Winnipeg. It secures cellulose wadding, its basic raw material, from Kimberly-Clark of Canada and converts it into Kotex, Kleenex, Delsey and Kleenex table napkins and distributes these products throughout Canada. Parent company merged with **International Cellucotton Products Co.**, Chicago, in September, 1955.

Kimberly-Clark Products showed a 10.8% increase in net sales and an 18% improvement in net profit for the year ended April 30, 1956, compared with the calendar year 1954.

Consolidated net earnings for Kimberly-Clark's three Canadian subsidiaries (Kimberly-Clark of Canada, **LongLac Pulp & Paper Co.** and **Upper Canada Lumber Co.**), for year ended April 30, 1956 rose 6% over previous year's $1.7 million. Individual results of the subsidiaries are not published.

Cellulose wadding production increased by 5.3%.

The Canadian companies wrote off normal depreciation of $218,355 ($225,977) and depreciation in excess of normal amounting to $128,291 ($168,278). At April 30, 1956 plant and property had been written down to $1,730,025 ($2,044,447) or 38.1% (45.3%) of original cost.

Minas Basin

Minas Basin Pulp and Power Co. manufactures groundwood pulp, paperboard as well as carrying out extensive lumbering operations.

Capacity of its Hantsport, N.S., mill is 110 tons of bleached and 20 tons of unbleached groundwood pulp daily. Most of the pulp is sold to Scott Paper Co. in the U. S.

The paperboard mill has a daily capacity of over 50 tons.

Company owns over 310,000 acres of timber and operates two power plants on the St. Croix River. The plants have a combined capacity of 7,100 hp. Additional power requirements are purchased from the Nova Scotia Light & Power Co.

Company's wholly owned subsidiaries include **Minas Shipping Co., Mapleleaf Lumber Co., Minas Stevedoring Co., Annapolis Basin Pulp & Power Co.** The company also controls **Canadian Keyes Fibre Ltd.** Associated companies include: **Standard Woodworkers Ltd., Parrsboro Lumber Co., Dartmouth Lumber Co.** and **Annapolis Valley Canners Ltd.**

In 1955, lumber shipments at 28,056,890 feet were up 9,705,064 feet over 1954. Paper board shipments also showed an increase and at 7,953 tons were 850 tons greater than in the previous year.

Perkins Tissue

Perkins Paper Products Ltd. manufactures a diversified line of paper products including waxed papers, toilet tissues, paper towels and napkins, crepe papers, gift wrapping papers,

(Continued on page 87)

The Ontario Paper Company
Limited
Thorold - Ontario

and

Its Affiliated Company

Quebec North Shore Paper Company
Montreal - Quebec

Manufacturers of Newsprint

and

of O.P. Brand Industrial Alcohol,
Vanillin, Lioxin and Aqualig

•

Mills at Thorold, Ontario and Baie Comeau, Quebec

•

Forest Operations at Heron Bay and Manitoulin Island, Ontario, and Baie Comeau, Franquelin and Shelter Bay, Quebec

WORLD-WIDE PULPSTONE SERVICE

In Canada

W. H. (Bill) Copeland, Pulpstone Technician at Norton Company of Canada Ltd., serves the mills from British Columbia to Newfoundland in the selection of the correct stone specifications to meet their needs. D. B. Annan, Plant Engineer at Hamilton, is in charge of pulpstone development and manufacture in Canada. Miss Lillian Ellis of the Sales Department has charge of order service for the Canadian pulp and paper industry.

In the United States

J. H. (Jim) Perry, Pulpstone Sales Engineer, is at the service of the pulp and paper industry throughout the United States to prescribe the right pulpstones to meet their exact requirements. Walter Beth, Pulpstone Engineer, is constantly working on improvements in Norton pulpstone design to even better meet and anticipate the needs of the industry. Ralph A. Bohlin is in the Worcester Sales Office to assure the proper handling of your pulpstone orders.

In Europe

Gustav Sundt of the export division, Norton Behr-Manning Overseas Inc., is located at Oslo and is in charge of engineering and sales for the many users of Norton pulpstones in the Scandinavian countries. J. S. Michel Biscayart with headquarters in Paris serves pulpstone users throughout central and southern Europe.

NORTON PULPSTONES

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NORTON COMPANY, Worcester, Mass.
EXPORT: NORTON BEHR-MANNING OVERSEAS INC., Worcester, Mass.

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Howard Smith
PAPER MILLS LIMITED
Toronto • Montreal • Winnipeg

MAKERS IN CANADA OF HIGH GRADE PAPERS

Specialty Firms Set New Records

(Continued from page 86)

shelf papers, table and tray covers and baking cups.

The sales of these products are handled by three separate divisions of the company: grocery trade; stationery, chain and departmental stores trade; industrial users, i.e. hotels, restaurants, hospitals, institutions, etc.

Company operates from and has its head office in a new modern plant in Ville St. Laurent, near Montreal, with a branch sales office and warehouse in Toronto. Products are also carried in warehouses from coast to coast with resident salesmen and agents in all major centres.

Company was originally incorporated in 1930 under the name Perkins Tissue Mills Ltd. by P. F. Perkins and J. F. Perkins of Holyoke, Mass. The common stock was acquired from them in 1937 by other American interests and was purchased by Canadian interests in 1947, and company is owned and operated entirely in Canada.

Price Bros.

Price Brothers Ltd. produces a large amount of paper besides its main newsprint operation.

The company operates under lease the Jonquiere Pulp Co.'s cardboard and specialty mill with 30,000 tons annual capacity.

A new machine, the "Curlator," for processing pulp based on new principles applied by the company's research department has been developed in co-operation with a machine-tool manufacturer.

At company's Kenogami mill in Quebec, besides the newsprint operation there is a cardboard and wrapping paper machine which has a capacity of 17,000 tons per annum. Products from this machine are mill wrappers, screenings board, pulpboard, egg case filler board and imitation leather board.

It is believed the "Curlator" will constitute an important contribution to the papermaking art and be of economic benefit to the company. Curlators were installed in the Riverbend mill in 1953.

Boxboard markets strengthened late in the year and lumber operations were considerably strengthened over 1954, annual report says.

For main write-up on this company, see newsprint section.

St. Regis Paper

St. Regis Paper Co. (Canada) Ltd., wholly owned subsidiary of **St. Regis Paper Co.**, New York, manufactures multiwall paper bags for industrial packaging of a wide variety of commodities.

Plants are located at Cap de la Madeleine and Montreal, Que., Dryden, Ont., and Vancouver, B.C., and use kraft paper produced in Canada. In addition, the Canadian company operates a machine shop in Montreal which provides packaging machinery service, and also manufactures wire ties.

Operations of the Canadian company continued on an expanding scale so far this year. During the past year, gains have been made in sales of bags for fertilizers and cement due to increased productive capacity in those fields. In addition, manufactured feeds, which are a relatively new market of large potential, show sales growth. Paper bags were adopted for packaging of asbestos.

In addition to multiwall bags, the Canadian company sells automatic and semiautomatic filing and weighing machines for packing multiwall valve and open mouth bags. The co-ordinated packaging system which this provides is said to be widely used throughout Canada. Many new machines are being installed in a variety of industries.

The use of polyethylene-coated kraft paper which is processed at Trois Rivieres continues to increase. A bag with a polyethylene-coated ply was successfully developed for peat moss, in the past a difficult product to pack in paper. There is growing use of bags with this polyethylene ply in the fertilizer industry.

North Western Pulp and Power Ltd., in which St. Regis Paper Co. owns a half interest, is constructing a bleached kraft pulp mill at Hinton, Alta., scheduled to go into production early in 1957 (see separate report).

St. Regis Paper Co. reported consolidated net income for 1955 at $19,047,755 against $14,920,489 in 1954. Consolidated net sales of the parent company were at record level of $257,056,527 compared with $200,090,143 in 1954.

Net sales for the first six months of this year were up 49% at $167,641,936 against $112,474,642 in the first six months of 1955.

New Capacity

Year	Rated Annual Capacity	Actual Production	Operating Percentage	Actual (a) Production	Value (a) 000's Dollars
	000's of Short Tons of 2,000 Pounds				
1925	1,823	1,619	88.8	1,537	$106,269
1926	2,121	2,068	97.5	1,889	121,065
1927	2,716	2,290	84.3	2,083	132,287
1928	3,281	2,612	79.6	2,414	144,147
1929	3,468	2,984	86.0	2,725	150,800
1930	3,848	2,791	72.5	2,498	136,182
1931	4,217	2,516	61.8	2,227	111,420
1932	4,142	2,186	52.8	1,919	85,504
1933	4,149	2,282	55.0	2,022	66,960
1934	4,182	2,911	69.6	2,605	86,811
1935	4,263	3,083	72.3	2,765	88,436
1936	4,218	3,535	83.8	3,225	105,215
1937	4,211	3,998	94.9	3,674	126,424
1938	4,535	2,983	63.8	2,669	107,051
1939	4,633	3,175	68.5	2,927	120,859
1940	4,716	3,770	79.9	3,504	158,447
1941	4,703	3,771	80.2	3,520	158,925
1942	4,763	3,455	72.5	3,257	147,074
1943	4,678	3,219	68.8	3,046	152,963
1944	4,726	3,265	69.1	3,040	163,655
1945	4,672	3,592	76.9	3,324	189,024
1946	4,641	4,506	97.1	4,162	280,810
1947	4,729	4,820	101.9	4,474	355,541
1948	4,883	4,983	102.0	4,640	402,100
1949	5,113	5,176	101.2	5,187	467,976
1950	5,227	5,279	101.0	5,318	506,968
1951	5,360	5,516	102.9	5,561	564,361
1952	5,510	5,687	103.2	5,707	600,516
1953	5,723	5,721	100.0	5,755	633,400
1954	5,920	5,984	101.1	6,001	657,487
1955	6,064	6,190	101.4	not available	
1956 (est.)	6,243	6,500	104.1	not available	

(a) Dominion Bureau of Statistics figures. These do not include Newfoundland, except in 1949 and later years, but do include relatively small quantities of hanging paper, poster paper, and side runs for pulping.

Westminster

Westminster Paper Co. produces a wide range of specialty products at its plant in New Westminster, B.C. Products include wrapping papers, decorative papers, plain and printed papers, water-marked papers, toilet papers, facial tissues and many others. Products are sold in Canada and in export markets, although the export business is not critical to the company.

In August, 1954, company entered a partnership with **Scott Paper Co.** of Chester, Pa., the largest manufacturers of sanitary paper products in the world.

Westminster introduced Scotties and Scotkins to Canadian market. Acceptance of these products has been gratifying but company will not derive a proper realization immediately as introductory expenses are costly. It plans to introduce other Scott brands as soon as possible.

This year's competition is stronger than last but business is still good. The Canadian market is constantly absorbing more of company brands and it is felt that business will grow at least as rapidly as in the past.

Company established an engineering department for planned renovation program. It also created a consumers' representative department and a technical control department. While establishment of these was costly it is expected that they will bring improved results in future years.

Net profit for the 11 months ended Dec. 31, 1955 was $761,759, compared to net profit of $741,574 for the 12 months ended Jan. 31, 1955. Company changed fiscal year end to calendar year. Earnings were equal to $33.37 ($20.20 in previous period) per Class A share and $1.57 ($1.55) per Class B share. Dividends amounted to 50c (50c) per A share and 80c (77½c) per B share.

Net sales increased to $8,726,248 ($8,030,150). Increase was primarily due to larger quantity of goods sold. A greater proportion of local sales also contributed.

Net capital expenditures amounted to $465,367 ($424,578).

Company redeemed $1,240,000 first mortgage bonds in April, 1955.

Capitalization outstanding at Dec. 31, 1955 included 22,828 Class A cumulative convertible shares, no par and 477,172 Class B shares, no par.

J. C. Wilson

J. C. Wilson Ltd., manufactures and distributes paper and paper products including wrapping paper, paper bags, folding boxes, shipping tags as well as distributing paper and paper products of other manufacturers.

Company operates a paper mill, bag making and paper box plant at Lachute, Que., using about 6,700 tons of groundwood, sulphite and kraft annually.

About 1,200 tons of this wood requirement are supplied by company's groundwood mill near St. Jerome, Que.

Control of the company last year was acquired by F. Howard Wilson and associates through purchase of stock from James C. Wilson, retiring president, general manager and director and Mrs. Dorothy D. Wilson, a former director.

Because conditions in downtown Montreal made efficient operations increasingly difficult, company last year relocated its head office and Montreal distribution division as well as its box plant. A new box factory was established next to company's paper mill at Lachute and a new building complete with railway siding was purchased in Montreal and is being used as a warehouse and head office.

New box plant machinery worth $50,000 and paper mill machinery worth $34,000 were purchased and installed during the year. In addition a new cost system was introduced in the box plant and studies are being completed at the paper mill to revise cost controls.

As a result of these relocations undertaken in 1955, company reports a dislocation of production with the result that production for the year is not considered normal. Company expects, however, that benefits of the new locations, equipment and cost controls will be reflected in years to come.

Sales for the year were $6,500,433 and represent approximately the same volume as attained in 1953 and 1954. However, gross profit margin was somewhat lower and expenses increased, largely due to upsetting conditions arising from the task of moving to new premises.

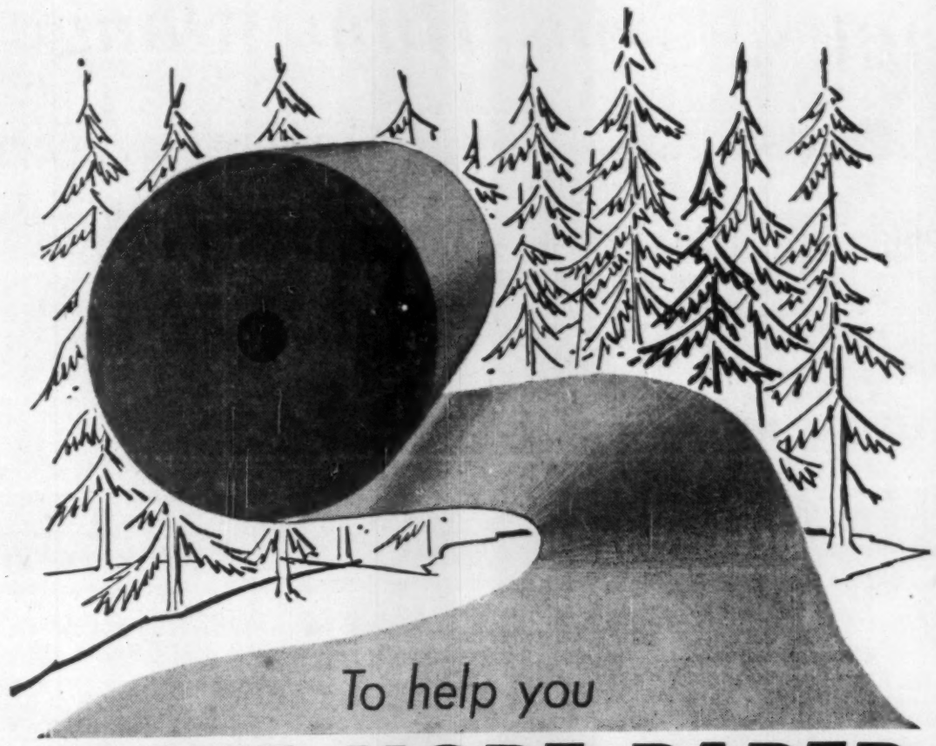
Accordingly company experienced a net loss (after tax adjustments) on the year's operations of $81,041 which compares with the net profit of $48,430 in 1954. During the year a dividend of $19,890 was paid out of accumulated earned surplus.

Sale of company's St. Alexander St. property resulted in a capital gain of $216,441 which, offset by the loss and dividend paid, resulted in the net addition to surplus during the year of $115,510. As at Dec. 31, 1955, surplus stood at $978,687.

At the year-end, current assets were $1,983,195 as against current liabilities of $764,577. Total assets were $3,511,780.

Company has long-term liability comprising 5½% mortgage repayable in 41 monthly installments. At the year-end outstanding balance of this mortgage was $111,016.

Capitalization comprises 205,700 common shares, no par value, of which 165,750 are issued and fully paid.



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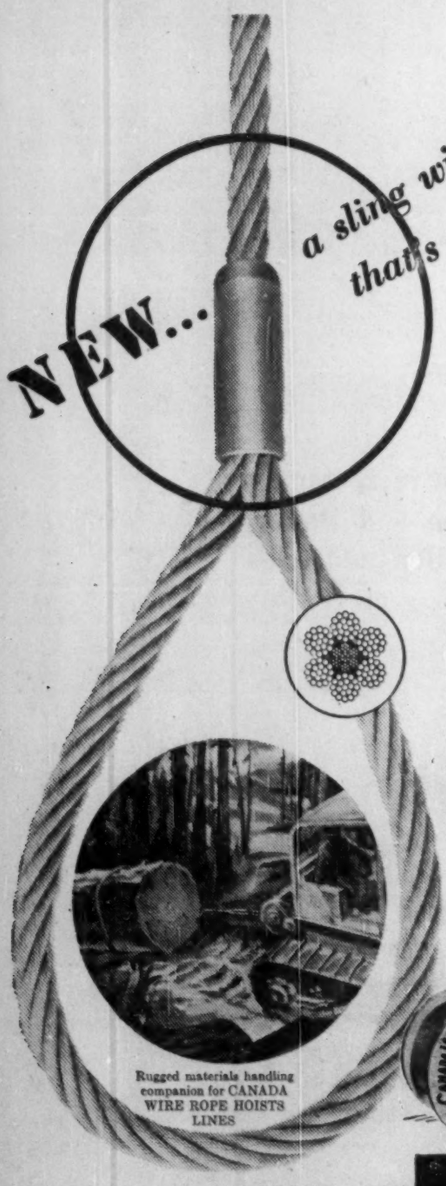

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⅜	3	6	12,800	2,560	2'0"
½	4	8	23,600	4,720	2'6"
⅝	5	10	35,400	7,080	3'0"
¾	6	12	51,000	10,200	3'6"
⅞	7	14	68,800	13,760	4'0"
1	8	16	89,600	17,920	4'6"
1⅛	9	17	105,200	21,040	5'0"
1¼	10	18	131,000	26,200	5'6"

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